# Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

April 15, 1957



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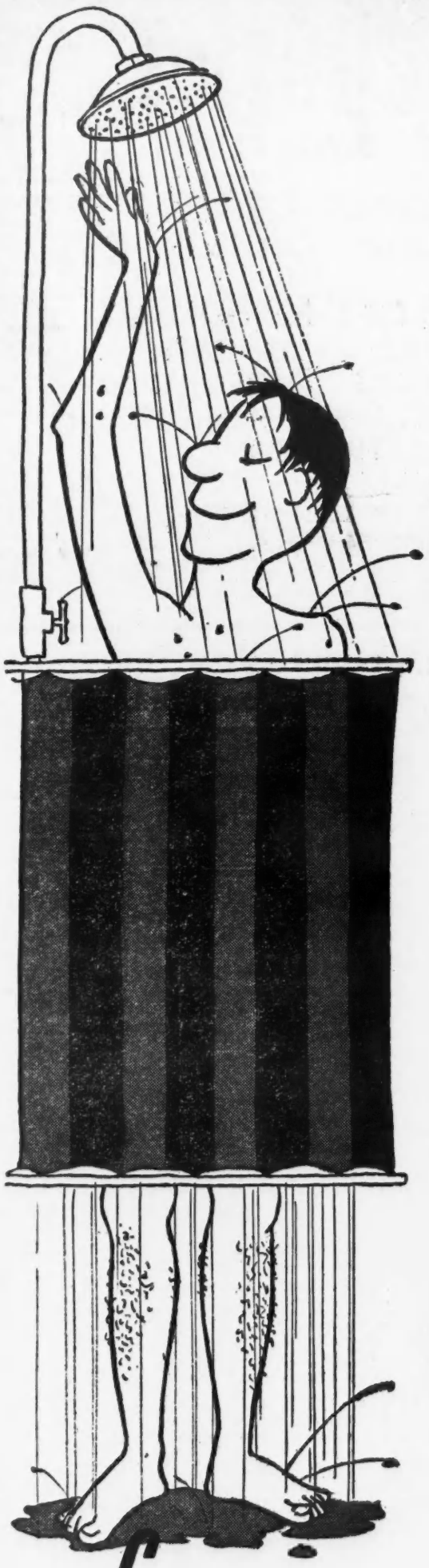

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# Oil, Paint and Drug Reporter

Vol. 171 No. 15 30 Church St., New York 7, N. Y. April 15, 1957


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**DIAMOND'S NEW MARK: "The Chemical Diamond," new trademark adopted by Diamond Alkali Company, Cleveland, Ohio, to identify its corporate organization and chemical products. (See separate story elsewhere on this page.)**

## Additives Measure of FDA Goes to Congress With Slight Concessions Given Industry

Food and Drug Administration has placed before congress its bill for controlling the use of chemical additives in foods. As was expected, the agency adheres closely to its original views on the degree of control to be exercised and makes only slight concessions to industry. The bill is patterned somewhat along the lines of the chemical pesticide law and is essentially an effort to fix tolerances on chemical additives for foods in much the same manner that tolerances are now established for pesticide chemicals.

Under the proposed law, the Secretary of Health, Education and Welfare would issue regulations fixing the levels of intake considered to be safe for man or animals.

*The principal features of its chemical additives bill are explained by FDA on page 40.*

The three points on which FDA yielded slightly to industry are these:

- Before any chemical additive can be used in foods, it must first be established to the satisfaction of the Secretary of Health, Education and Welfare that the additive is safe for its intended use. Appeals from the secretary's ruling would be made in the circuit courts in the usual manner.
- Unless the additive is declared by the secretary not to be a poisonous or deleterious substance, it must have some functional value to be approved for use.
- The controls would apply to all existing additives except those generally recognized among experts as having been adequately shown through scientific procedures or through prolonged use to be safe.

The section of the bill defining the secretary's duties in fixing the levels of intake states that he shall, as soon as practicable after filing of the petition:

"(A) by order establish a regulation (whether or not in accord with that proposed by the petitioner) announcing, with respect to one or more proposed uses of the chemical additive involved, the conditions under which such additive may be safely used (including, but not limited to, specifications as to the particular food or classes of food in or on which such addi-

—Continued on page 43

**DIRECTOR OF RESEARCH: Dr. John A. King, named director of research for Armour & Co., Chicago.**

## Foote Gets Lithium Contract From AEC

Foote Mineral Company, Philadelphia, has landed a big contract to supply the Atomic Energy Commission for five years with lithium hydroxide. The disclosure was made last week by Gordon H. Chambers, Foote chairman, in a letter to the company's stockholders.

The quantity of lithium hydroxide involved and the commission's end-use for it are classified information. However, Mr. Chambers says that he has been authorized to reveal that AEC is interested in lithium-6, one of lithium's two naturally occurring isotopes.

At present, three producers are supplying lithium hydroxide to the commission. So-called "tails" (material depleted with respect to the lithium-6 isotope) are available only to the original producers in the same proportion in which it was supplied.

Chemically, Foote's board chairman states, this material is identical to virgin lithium hydroxide. The importance of this to Foote's lithium customers is that an adequate share of production is available for commercial use in the form of these "tails."

"In spite of our contractual arrangements with AEC," the letter continues,

—Continued on page 63

## Dicyclopentadiene Market To Be Entered by Enjay

Enjay Company, New York, announced today that effective immediately it will begin marketing a high-purity dicyclopentadiene—a product used in the manufacture of a variety of organic chemicals.

In addition to its present major applications as a raw material for making insecticides, printing inks, resins and drying oils, dicyclopentadiene is a suitable raw material for a number of other unusual and synthetically important chemical products, Enjay stated.

The company said its dicyclopentadiene is available either in drums or tankcar lots and has a purity of at least 95 percent.

## Acrylonitrile Works in Texas Being Expanded by Monsanto

Monsanto Chemical Company has begun an expansion program at its Texas City, Tex., acrylonitrile plant that will increase output to more than 100 million pounds.

The information follows an earlier announcement by Chemstrand Corporation, a partially-owned subsidary of Monsanto, that a 50 percent increase in its "Acrilan" production capacity is being rushed to completion. (See separate story on page 5.) Acrylonitrile is a major raw material in the manufacture of "Acrilan" products.

## Carbide Installation Doubles Firm's Ethanolamine Output

A new ethanolamines unit that more than doubles Carbide's ethanolamines capacity is now on stream at the Seadrift, Tex., plant of Carbide and Carbon Chemicals Company, New York, a division of Union Carbide and Carbon Corporation.

The additional capacity for ethanolamines now makes it possible for Carbide to supply ethanolamines from two sources —Seadrift and South Charleston, West Virginia. This expansion also makes it possible to supply more ethanolamine derivatives.

Already, Carbide is doubling its capacity for producing morpholine, which is made by dehydrating diethanolamine. Further expansions are to be expected in an integrated pattern of growth.

## Salicylaldehyde Unit Projected by Heyden

Heyden Newport Chemical Corporation, New York, is constructing a new plant at Fords, N. J., to produce over a million pounds annually of salicylaldehyde, an intermediate in the manufacture of dyestuffs, odor bases and petroleum additives, Simon Askin, president, announced today.

An entirely new catalytic process developed by Heyden research will be used, which is economical and avoids the usual byproduct problems.

"Heyden Newport is one of the leading producers of salicylic acid, salicylates, benzaldehydes and other aromatic intermediates," Mr. Askin said. "The new salicylaldehyde production is a logical expansion of Heyden Newport's present product line.

"Completion of the new plant is scheduled for early in the first quarter of 1958.

"The process we have developed is a complete departure from any now in commercial practice," Mr. Askin stated. "It is flexible and can lead to the manufacture of a variety of acids, aldehydes, alcohols and esters, many of which are in commercial use today."

## Sulfur Facility Operating

Enough molten sulfur to fill eight tankcars can be produced each day at the sulfur recovery plant, latest unit to be placed in operation at Tidewater Oil Company's Delaware refinery south of Wilmington. The sulfur plant is the eighth manufacturing unit to go on stream at the 130,000 barrel-a-day refinery.

## BDSA's Funds, Industry Units Hit By House Vote

The Business and Defense Services Administration will have to get along next year on only 50 percent of the budget funds that had been recommended by the White House. Its industry units, including the chemical and rubber division, will be wiped out as of July 1, if last week's action in the house is carried through.

The vote against the funds came on passage of the annual appropriation bill for the Department of Commerce, which felt several striking blows as the economy ax continued to swing through the lower house.

**Pin-Pointed by Appropriations Committee**

The cut in the BDSA appropriation was pin-pointed by the committee on appropriations in its report accompanying the bill to apply to the industry divisions and not necessarily some other activity of the agency. The committee said it was allotting $3,515,000 for BDSA or $3,560,000 less than the amount budgeted by the White House, and the reduction is to [illegible] funds for the industry divisions of this bureau."

No explanation of the reasoning behind the reduction was contained in the report, but a perusal of the hearings before the appropriations committee on the BDSA item in the budget indicated some antagonism among the members towards the agency because of an alleged tendency to increase its personnel by creating two low paying jobs where one high salaried vacancy existed, and some question as to the usefulness of the agency in the present state of mobilization.

During floor debate on the bill shortly before its passage, only two members rose to question the action of the committee in seeking to abolish the industry divisions, but no attempt was made to restore the funds by amending the bill before its passage. A fight to save the divisions, however, was launched immediately in the senate by Secretary of Commerce Sinclair Weeks when the bill came up for hearings before the senate appropriations committee.

He pointed out that the industry divisions are called upon daily to help channel vital materials to defense industries, and said that this should not be a matter for economy when vital defenses are

—Continued on page 60

## Sequestering Agents Plant Near Completion by Maas

A. R. Maas Chemical Company, South Gate, Calif., a division of Victor Chemical Works, has announced that commercial quantities of "Questex" (the trade name for a group of ethylene diamine tetra-acetate (EDTA) products) are to be manufactured in a plant which is now nearing completion at South Gate.

"Questex" organic sequestering agents are of high purity, and the chelate multivalent, metallic cations into outstanding-stable, co-ordinated anionic complexes. They change the whole water chemistry of such ions as calcium, magnesium, copper and iron. These metals are so firmly sequestered by "Questex" that they no longer form precipitates with carbonate, oxalate, orthophosphate or hydroxyl ions, according to Maas.

"Questex" represents specially purified material produced by a process worked out in the Maas research laboratories and is the first group of polyamino-acid-based organic sequester agents which will be manufactured by the company for distribution throughout the United States. The company is in pilot plant production.

### *Chlorine-Caustic Unit Is Doubled by Olin*

The industrial chemicals division of Olin Mathieson Chemical Corporation, New York, has announced the start of production of chlorine and caustic soda in a newly-completed addition to its plant at McIntosh, Ala., north of Mobile. The expansion cost $8 million.

The enlarged plant is capable of turning out 250 tons of chlorine and 280 tons of caustic a day—double the previous capacity. The original plant was completed in 1952.

## Diamond Alkali Company Adopts New Trademark

Diamond Alkali Company, Cleveland, Ohio, which has used a horizontal lozenge or diamond-shaped trademark for many years, has adopted a new one to identify its corporate organization and chemical products.

Called the "Chemical Diamond," the new emblem suggests both the letter "d" for Diamond and a chemical retort. In the center of the design is a vertically placed diamond. The style of the calligraphic letter "d" used comes from a fifteenth century French manuscript. (The new Diamond mark is illustrated elsewhere on this page.)

Behind the new trademark, Diamond says, is a long-term coordinated corporate-identification program whose ultimate aim "is to 'remake' and mold the multitudes of sales-promoting Diamond packages into a single, unified, strong selling team that, through repeated application of the basic design theme, will effectively augment our company's sales, merchandising, advertising and public relations activities."

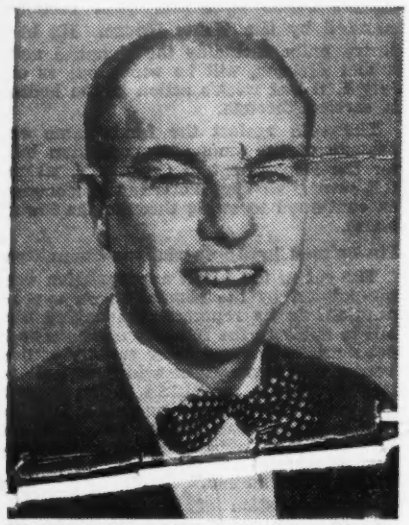
Chief purpose of the design, it adds, is to sell more Diamond chemicals throughout agriculture and industry. A secondary target "is to build, in the public mind, progressively broader recognition of Diamond as one of America's principal producers of agricultural and industrial chemicals."

The new symbol, the company feels, is more truly indicative as a mark of identification for Diamond's line of organic and inorganic chemicals, now numbering more than 100 in contrast to the handful of al-

—Continued on page 61

# GAF Sale-Blocking Measure Before Senate Unit This Week

The senate judiciary committee is tentatively scheduled to meet this week on legislation to hold up the proposed sale by the government of its controlling interest in General Aniline & Film Corporation, New York, pending a decision by congress on policy to be followed in connection with disposition of enemy assets seized by the government during the war. A bill to hold up the sale, now scheduled to take place May 13 by the Department of Justice, is before the senate judiciary committee and was to come up for consideration last week. No action could be taken, however, because a quorum of the committee failed to show and the meeting had to be called off.



**IN ORGANICS SALES POST: James W. Ritz, promoted to the position of assistant sales manager of its organic chemical sales department by Emery Industries, Inc., Cincinnati, Ohio.**

Strong efforts are being made by congressional groups in both the house and senate to have the government change existing policy on disposition of former enemy properties and return such properties to former owners. The administration has expressed a willingness to go along with such a plan insofar as claims of individuals amounting to $10,000 or less are concerned. It has opposed the return of properties in excess of this amount.

**Called Costly to Taxpayers**

Assistant Attorney General Dallas Townsend has stated that the return of German and Japanese property seized during World War II would cost American taxpayers "at least half a billion dollars."

"One of the most unfair aspects of a general return of all German and Japanese property," Mr. Townsend told a senate judiciary subcommittee, "is that it would donate huge windfalls to large enemy corporations, industrialists and their agents, many of whom were strong supporters of the militaristic and aggressive policies of the former governments of Germany and Japan."

John J. Wilson, attorney for Interhandel, Swiss investment company whose 90 percent interest in General Aniline & Film was seized in 1942, has made the charge that the proposed sale by the Alien Property Office of General Aniline is "confication in its clearest form."

He said, "The Swiss government says that Interhandel is and always has been Swiss. The German government has disclaimed any interest in Interhandel, stating that it is Swiss property. Interhandel has no hope of receiving compensation for its confiscated property from the Swiss government."

# Potash Land Put Up For Lease in N. Mex.

The Department of the Interior is releasing 1,840 acres of potash lands in Eddy County near Carlsbad, N. Mex., for competitive leasing. The lands are part of the potash reserve of 4,160 acres established by executive order in 1939 and enlarged in 1949.

Edward Woozley, director of the Bureau of Land Management, said that the action is being taken upon notification by the department's Geological Survey that the area involved is no longer regarded as a strategic source of potash ore. This determination was based upon the discovery of far more significant potash ore

—*Continued on page 51*

# S.-W. Building in Texas To Replace Present Plant

Ground has been broken for a new Sherwin-Williams Company paint, varnish and lacquer factory and wholesale distribution center at Garland, Tex. The $3 million group of buildings is expected to be in operation early next year.

The new facilities in the Dallas area will replace Sherwin-Williams' present Dallas plant.

# Beryllium Unit Being Made At a Railroad Roundhouse

On a 2,000-acre tract at Ashmore, Pa., a railroad roundhouse which once serviced steam locomotives for the Pennsylvania Railroad is being converted into a beryllium metal extraction plant for Beryllium Corporation by Lummus Company.

In September Lummus began initial process engineering and design of the $4 million plant to extract beryllium metal from beryl ore. Scheduled to start operations August 6, the new plant over the next five years will produce 500,000 pounds of the light metal—all contracted for by the Atomic Energy Commission.

# *The Week's Price Changes*

**Zinc Cyanide Price Advances for the First Time in Six Years. Copper Cyanide, Red Lead, Egg Albumin Flake Decline.**

**Prices Advanced**

Cottonseed oil, crude, ¼c. per lb. (p. 57).
Refd., ¼c. per lb.
Lard, cash, ½c. per lb. (p. 57).
Linseed meal, 50c. to $1 per ton (p. 57).
Linseed oil, 2/10c. per lb. (p. 57).
Linseed oil acid, 2/10c. per lb. (p. 57).
Peanut oil, crude, ¼c. per lb. (p. 57).
Refd., ¼c. per lb.
Spermaceti wax, 1c. per lb. (p. 57).
Tin, ¼c. per lb. (p. 37).
Zinc cyanide, 2.7c. per lb. (p. 37).

**Prices Reduced**

Albumin, egg, flake, 8c. per lb. (p. 62).
Citronella oil, Ceylon, 5c. per lb. (p. 54).
Coconut oil, crude, ½c. per lb. (p. 57).
Copper cyanide, 2.2c. per lb. (p. 37).
Lauric acid, ¾c. per lb. (p. 57).
Molasses, New Orleans, ¼c. per gal. (p. 44).
Olive oil, Tunisian, 5c. per gal. (p. 57).
Peanut meal, $3 per ton (p. 57).
Red lead, ¾c. to 1c. per lb. (p. 59).
Soybean meal, 50c. per ton (p. 57).
Tallow, inedible, fancy, bleachable, ½c. per lb. (p. 57).
Inedible, prime, ½c. per lb.
special, ½c. per lb.
Tung oil, ¼c. per lb. (p. 57).

**OPD Price Index**

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

| April 12, 1957 | April 5, 1957 | April 13, 1956 |
|---|---|---|
| 110.85 | 110.87 | 108.45 |

# 'CBR' War Seen Critical Problem

Toxicological weapons pose just as great a civil defense problem as nuclear weapons, and ignoring them will not make them go away. This was the warning given last week by Brig. Gen. J. H. Rothschild, commander of the Army Chemical Corps Research and Development Command, in a speech before the monthly luncheon meeting of the Synthetic Organic Chemical Manufacturers Association, at the Roosevelt hotel, New York. Title of the speech was "The Military-Industrial Partnership in National Defense Against CBR Warfare."

**Brig. Gen. J. H. Rothschild**

Gen. Rothschild pointed out that toxicological weapons used in "CBR" (chemical, biological and radiological) warfare offer many unique advantages to an enemy.

It is entirely possible that an enemy would use chemical and biological weapons to preserve the prize of American industry with a minimum of destruction, he said.

The enemy would need only to remove the human element to put these factories and plants out of production. For this purpose, chemical and biological agents would be ideal, since the physical plants

—*Continued on page 51*

# Interhandel Slapped Down By Gov't in Ruling on GAF

The United States Court of Appeals for the District of Columbia last week rejected the two latest moves of Interhandel to keep alive its suit against the government over control of General Aniline & Film Corporation, New York.

The appeals court affirmed two earlier rulings of the lower court as follows:

- Refusal of Judge David A. Pine to give Interhandel more time to produce certain records for inspection, which the government contended was needed in its defense against the claim of Interhandel that it rightfully owned the company.
- An appeal from the decision of Chief Judge Bolitha Laws in the United States District Court last June dismissing the Interhandel suit for recovery of the company "with prejudice" which means that the suit cannot be filed again.

# Sun Chemical Tells Plans To Relocate in Manhattan

Plans to move all administrative and executive activities of Sun Chemical Corporation to New York from Long Island City, N. Y., have been announced.

Sun Chemical has signed a lease to occupy approximately 42,000 square feet in the new thirty-four story building being erected by Uris Brothers at 750 Third avenue, between 46th and 47th streets. Plans call for occupancy early next year.

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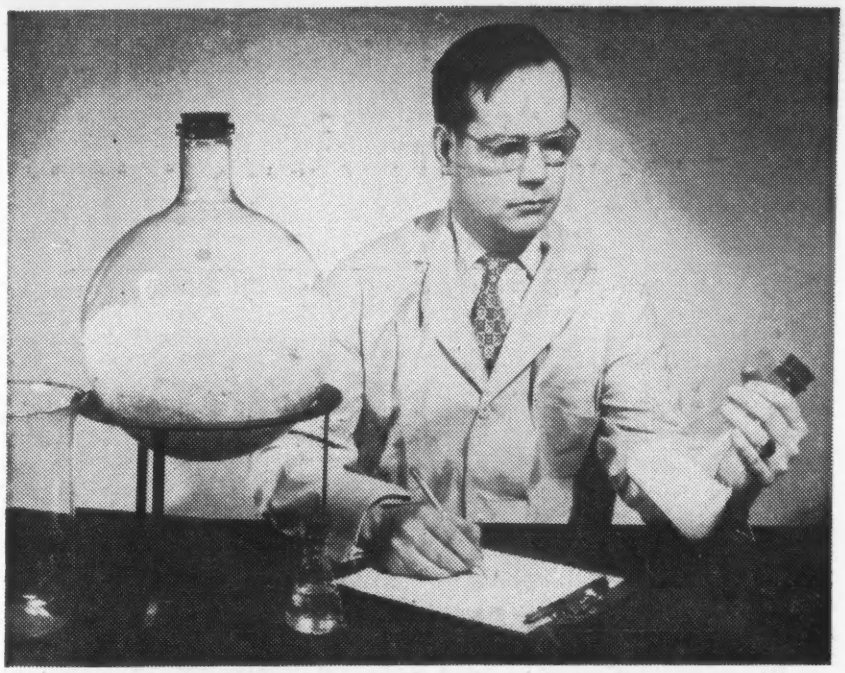


**QUAKER OATS' NEW PRODUCT: F. L. Blake, chemist for Quaker Oats Company, Chicago, examines levulinic acid crystals taken from the round-bottom flask on the left. The acid, a new Quaker Oats' product, is being offered from the firm's pilot plant.**

# Levulinic Acid Is Being Offered From Pilot Plant by Quaker Oats

Levulinic acid, on which Quaker Oats Company, Chicago, spent six years of research plus more than one-half million dollars, is now available for distribution in drum quantities from a pilot plant operation. The acid is being sold in 5-gallon cans and 55-gallon drums. Experimental development quantities in drums are priced at $1 per pound. After commercial production has been reached, it is expected that prices will be much lower.

Quaker Oats will produce the acid at the rate of fifty to 100 tons a year under the present pilot plant operation, located in Omaha, Neb.

The acid is said to have a wide potential market as an inexpensive chemical intermediate for a large number of synthetic organic chemical products, including synthetic resins and solvents.

**Products Unusually Versatile**

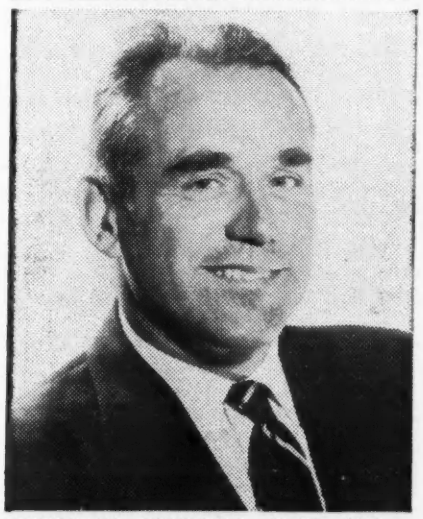
The product is the simplest member of the gamma-keto carboxylic acids. It is unusually versatile and offers many opportunities in industrial developments, Quaker Oats pointed out.

According to the company, the acid can be used in a wide variety of chemical reactions. It reacts in some instances as a carboxylic acid, and in others as a ketone. The 1,4 stereochemical relationship of its functional groups frequently results in cyclization reactions, forming heterocylic compounds. Levulinic acid undergoes condensation reactions involving its reactive methylene groups.

Among the compounds which can be made from levulinic acid in good yield are gamma-valerolactone, succinic acid, 5-methyl-2-pyrrolidone, calcium levulinate, and alpha-angelica lactone.

Levulinic acid is produced by treating cellulosic material remaining after the extraction of furfural from corncobs. The compound is formed when this raw material is treated with strong acids at high temperature.

Many cellulosic raw materials can be used to produce levulinic acid. Thus its potential availability is extremely large, Quaker Oats pointed out.



**AROMATICS TECHNICAL HEAD: Willem Lasthuysen, appointed technical director of the aromatics division of Rhodia, Inc., New York.**

# Naugatuck Division Keeps on Expanding

Naugatuck Chemical Division of United States Rubber Company, announced in Baton Rouge, La., last week the completion of one expansion program and the start of another. Cost of both programs will total more than $9 million.

Production of "Paracril," an oil-resistant synthetic rubber, has been increased 60 percent at the Baton Rouge plant at a cost of approximately $2 million.

Foundations have been laid and steel will soon rise for a new chemical plant on a 150-acre site in the Scotts Bluff area of

*—Continued on page 66*

# ADM Buys Soy Protein Unit

Archer-Daniels-Midland Company, Minneapolis, Minn., has purchased the isolated-soy-protein business of Drackett Company, Cincinnati, Ohio. The purchase, to become effective July 1, includes Drackett's soy protein processing plant at Evandale, Ohio. The move marks Archer-Daniels' first major entry into the isolated-protein field.

# Hoffmann-La Roche Process To Make Vitamins A, E and K Eliminates Lemongrass Oil

Hoffmann-La Roche, Inc., Nutley, N. J., has developed a new vitamin-manufacturing process which it says will make this country independent of overseas raw materials for vitamins A, E and K. The new method, unveiled last week at the American Chemical Society's 131st national meeting in Miami, Fla., reportedly eliminates the need for imported lemongrass oil as a source. According to Dr. Walter Kimel, a research chemist in the firm's technical development department, starting materials for the process are acetone and acetylene.

The "ready availability and inexpensive nature" of the starting materials make the process commercially practical, Dr. Kimel noted, adding that "a multi-million dollar plant is now nearing completion which will make us completely independent of naturally occurring products of foreign import."

**Other Chemical Material Highlights**

Among other chemical process material highlights at the ACS Miami conclave were the following:

- Hercules Powder Company, Wilmington, Del., revealed that it has a new, long-lasting pesticide called "Navadel" which is extremely effective against enemies of cotton, citrus fruit and cattle.
- Department of Agriculture said it has discovered a new antibiotic named "Duramycin" which may help combat a variety of crop diseases.
- Rayonier, Inc., Shelton, Wash., reported that it has found a way to convert lignin via vanillin to a new synthetic polyester fiber.
- Ciba Pharmaceutical Products, Inc., Summit, N. J., told of the development of a new pain-killing analgesic which acts nearly five times as fast as morphine and has a long-lasting effect.
- General Aniline & Film Corporation, New York, described methods for formulating iodophor concentrates with phosphoric acid to obtain the acidic solutions required for maximum biocidal activity and chemical stability.
- A Boston University research indicated that an effective single-solution process for quickly developing, stopping and fixing photographic films is in the offing.
- Lakeside Laboratories, Inc., Milwaukee, Wis., reported the synthesis of potent

*—Continued on page 61*

# Urethane Patents of duPont No Longer Require Royalty

E. I. duPont de Nemours & Co., Wilmington, Del., has announced that firms licensed under duPont's isocyanate patents to make urethane foams and coatings will no longer be required to pay royalties under a new policy announced by the company's elastomer chemicals department.

Upwards of 100 licensees have been notified that, effective April 1, the one and one-half percent royalty on the sell-price of urethane products manufactured under duPont patents has been eliminated.

William H. Ayscue, duPont's isocyanate sales manager, said "that the new royalty-free policy is designed to further stimulate and encourage the fast growing industry by removing the requirements of record keeping, reporting, and royalty fees."

# Gibberellic Acids Made Commercially by Abbott

Abbott Laboratories, North Chicago, Ill., is making gibberellic acids available in commercial quantities this month.

To date, the acids have been available only in small quantities for research purposes. Abbott's chemical sales division will supply them in crystalline form ready for commercial formulation and will provide technical assistance in formulation or with other problems.

**RETIRING VICE-PRESIDENT: Robert C. Palmer, vice-president and chemical director of Newport Industries Company, a division of Heyden Newport Chemical Corporation, New York, who will retire this month after forty-one years of service.**

# Estrogen Compound Beveloped by the VA

A new form of the sex hormone estrogen, which may have many uses in medicine and agriculture, has been discovered by Veterans Administration. The synthetic chemical was produced in the laboratory of the VA center at Wood, Wis., by biochemist Dr. Jerre L. Noland, during heart disease studies involving cockroaches.

The compound is cheaper and much more prolonged-acting than other forms of estrogen, VA said.

The process developed by Dr. Noland to modify estrogen also may be adapted to produce improved long-lasting forms of commonly used drugs such as aspirin and antibiotics, VA said.

The form of estrogen most used by doctors in treatment of diseases is known as diethylstilbestrol. In human beings, the effect of a single dose lasts only a few

*—Continued on page 43*

# Surfactant From Sugar Is Offered by Berkeley

The first surface active agent from sugar to be introduced to industry has been produced at Berkeley Chemical Corporation's pilot plant, Berkeley Heights, N. J.

Marketed as "Sucrodet D-600," it is a recrystallized sucrose dipalmitate, developed primarily for utility in the food, pharmaceutical and cosmetic industries and for acceptance in basic application research on these new surfactants.

Within a few months it is planned to follow "Sucrodet D-600" with sucrose esters derived from stearic, oleic, myristic and lauric acids, Berkeley said.

## *'Acrilan' Plant Output Due for Big Increase*

Production capacity of Chemstrand Corporation's "Acrilan" acrylic fiber plant in Decatur, Ala., will be expanded by 50 percent.

The plant, now operating at its full production rate of 30 million pounds annually, will be enlarged to 45 million pounds capacity. The new facilities are scheduled for completion in the first quarter of 1958.

# 'Rilsan' Synthetic Fiber Marks French Plastics Growth

A synthetic fiber, made from castor beans, appeared on the American market last week as further evidence of the rapid growth being made by the plastics industry in France.

The product is "Rilsan," a super-polyamide created by the Organico Company of France and now taking its place in that country's rapidly rising output of plastics.

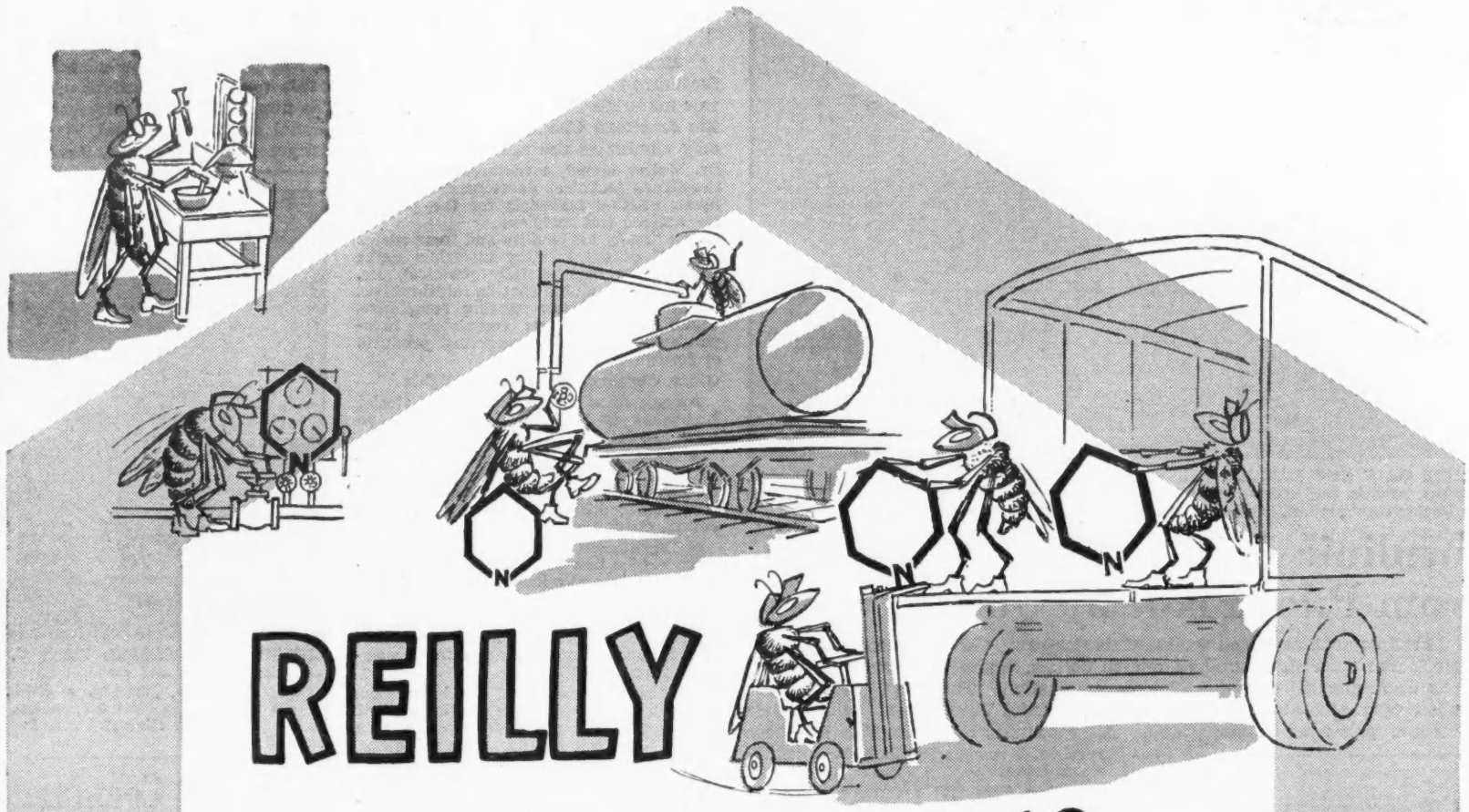
The fiber was introduced to the United States by Snia Viscosa, an Italian fiber and chemical company, which started developing the material for textile use in 1951 and is now producing it commercially outside Milan.

"Rilsan" was originally placed on the market by Organico, which developed production from the laboratory stage through to the industrial complex. The product had its origin in a study of the castor bean that was begun back in 1942. Today one plant at Marseilles alone uses 10,000 tons of castor oil a year to turn out 3,500 tons of "Rilsan."

Although the selling price in this country has not yet been determined, "it will be competitive with nylon," said J. John Lawler, of Continental Synthetic Textiles, Inc., the sales agent.

He said the fiber has a high degree of dye absorption, a greater covering power

*—Continued on page 39*



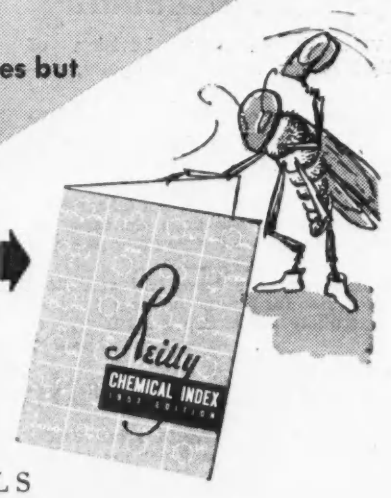
# REILLY

# *is busy as a Bee*

**Reilly's** Synthetic Pyridine plant is **busy** as a bee producing pyridine, 2-picoline, 3-picoline and 4-picoline and derivatives thereof, such as 2-aminopyridine, 2,6-diaminopyridine, 2-vinylpyridine, 4-vinylpyridine, Isonicotinic Acid, Methyl Isonicotinate and Nicotinic Acid **because** users of these products welcome the security and stability of an assured source of supply.

We'll gladly supply information not only on our synthetic pyridines but also on our Coal Tar Chemicals — so why not write now.

Send for your copy of the Reilly Chemical Index




**REILLY TAR & CHEMICAL CORPORATION**

MERCHANTS BANK BUILDING, INDIANAPOLIS 4, INDIANA

*SALES OFFICES IN PRINCIPAL CITIES*

HETEROCHEMICALS • COAL TAR CHEMICALS

# Association Meetings

**National Petroleum Association, semi-annual meeting, Cleveland hotel, Cleveland, Ohio, April 16-18.**

Air Pollution Control Association, annual meeting, St. Louis, Mo., June 2-6.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemists, annual meeting, Sheraton-Mayflower hotel, Akron, Ohio, May 22-24.

American Oil Chemists' Society, annual meeting, Roosevelt hotel, New Orleans, La., April 28-May 1.

American Pharmaceutical Association, Statler hotel, New York, April 28-May 3.

American Pharmaceutical Manufacturers' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 27-29.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 16-21.

American Zinc Institute, annual meeting, Drake hotel, Chicago, April 25-26.

Association of Consulting Chemists & Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 24; annual meeting, Belmont-Plaza hotel, New York, October 22.

Chemical Bureau Alumni Association, spring meeting, Lexington hotel, New York, May 16.

Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 27-28; Lake Placid, N. Y., September 16-17.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22.

Commercial Chemical Development Association, resort meeting, French Lick, Ind., May 13-14.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Electrochemical Society, Statler hotel, Washington, D. C., May 12-16.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Flavoring Extract Manufacturers' Association, annual convention, Roosevelt hotel, New York, May 19-22.

Lead Industries Association, annual meeting, Drake hotel, Chicago, April 24-25.

Manufacturing Chemists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Industrial Research Conference, sponsored by Armour Research Foundation, Conrad Hilton hotel, Chicago, April 24-25.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13

Rutgers Pharmaceutical Conference, New Jersey State University, New Brunswick, N. J., May 8.

Proprietary Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., May 12-15.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, October 14.

Scientific Apparatus Makers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 27-May 2.

Society of Cosmetic Chemists, annual meeting, Commodore hotel, New York, May 10.

Society of Flavor Chemists, luncheon and flavor symposium, Roosevelt hotel, New York, May 22.

Synthetic Organic Chemical Manufacturers Association, annual outing Skytop Lodge, Skytop, Pa., May 27-29.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 7-9.

# Chemical Progress Celebrated In Events Held Throughout US; Killian Calls for Research Aid

A sharper national policy to protect and encourage basic scientific research is a major need in this country today, says Dr. James R. Killian, jr., president of Massachusetts Institute of Technology. Such a policy, Dr. Killian believes, will enable this country to meet the challenge of Soviet science and will help to "achieve the full promise of our evolving American industrial society." Dr. Killian made his remarks last week at an educators luncheon in New York, given by chemical companies under the auspices of the Manufacturing Chemists Association.

The event was one of many held nationally to celebrate Chemical Progress Week. Programs included luncheons, dinners, addresses by industry and government figures and a general publicity program to better acquaint the public with the entire chemical field.

**Hull Speaks in Chicago**

Meanwhile, in Chicago, John E. Hull, president of MCA, told 1,200 educators and business men that America's best hope for peace lies in our military strength. He told the group celebrating Chemical Progress Week in that city that the present international situation is a "global armed truce" and that to maintain even this position "we must maintain the highest state of military and industrial preparedness."

Cleveland Lane, assistant to the president of MCA, speaking at a Chemical Progress Week education dinner in Newark, N. J., called for "face-to-face cooperation between industry people and educators." He said the chemical industry is aware that if "we don't increase the number of scientific and technical graduates, we and the whole country are in trouble."

Mr. Lane added that "our industry and the country need well trained, educated people in all fields. This country cannot afford to raise a race of specialists within specialties. We also must have plenty of people who can see over the tops of the trees in the forest," Mr. Lane added.

As part of the New York celebration, Dr. William Jansen, superintendent of schools, was honored with a testimonial presented by the city's chemical companies, in recognition of his long service to education, especially in the field of science.

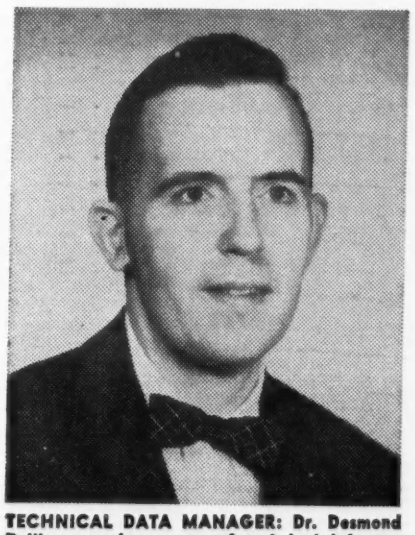
Dr. Jansen has been a prime mover in such contributions to science education as

—Continued on page 41

**ASS'T RESEARCH HEAD: Dr. Thomas G. Fox, a research executive with Rohm & Haas Company, Philadelphia, who will join Mellon Institute on June 1 as an assistant director of research.**

# Polethylene Is Seen Introducing A New Era in the Food Industry

"It is just a question of time until anyone who can boil water can pass himself off as a master chef. This is because polyethylene, in the form of tough flexible packaging film and in laminates, is helping to usher in a new era of convenience in food preparation and serving. For the housewife, this new era can mean an end to messy clean-up chores such as scouring cooking pots or washing mixing bowls, which even automatic dishwashers cannot always handle." This statement was made by J. R. Akers, manager of the flexible packaging division of Bakelite Company, New York, a division of Union Carbide & Carbon Corporation, at the National Packaging Exposition in Chicago last week.



**TECHNICAL DATA MANAGER: Dr. Desmond Reilly, named manager of technical information for Food Machinery & Chemical Corporation's recently formed FMC organic chemicals division in New York.**

"Perhaps before 1957 is over," Mr. Akers said, "many housewives will be able to walk into the supermarket and select, from the frozen-food display case, a variety of pre-prepared gourmet dishes packaged in a boilable bag made of a polyethylene and polyester plastic film laminate.

"A steady rise in family income," Mr. Akers added, "coupled with rapid technological advance has put convenience within the reach of the average family pocketbook. When the housewife visits the supermarket, she is more and more attracted by items that offer greater con-

—Continued on page 63

## Cowles Silicate License Granted to French Firm

Cowles Chemical Company, Cleveland, Ohio, has granted a license to Sifrance, Paris, France, to manufacture anhydrous sodium meta, sesqui and ortho silicates by the Cowles process and the rights to use Cowles trademark "Drymet."

Sifrance is a jointly owned subsidiary of four French silicate manufacturers, Saint Gobain, Le Silicate, Kuhlmann and Progil. Sifrance will build a plant to manufacture these silicates at Nogent L'Artaud (Aisne) on the River Marne, northeast of Paris. The plant is scheduled to be put in operation the latter part of this year.

## Education, Business Seen Keys to Chemicals' Future

New dimensions on the chemical frontier are in education and in business, rather than in chemistry. So stated Dr. Sydney Steele, of Atlas Powder Company, Wilmington, Del., in a speech entitled "New Dimensions on the Chemical Frontier." The talk was given before the Southern California section of the American Chemical Society, at the Rodger Young Auditorium, Los Angeles, last fortnight.

During our lifetime, Dr. Steele pointed out, the fullest development and use of our country's brainpower, and the provision of a business climate based on perception and understanding, have become essential to the maintenance of our position in a growingly competitive world. They may also become vital to our survival as a nation, he said.

## Chipman Chemical Offering A New Miticide, Scalicide

"Tetram 75," an organic phosphate, has been announced by Chipman Chemical Company, Bound Brook, N. J. This new product is particularly effective for control of mites on cotton and deciduous fruit, as well as spider mites, rust mites and scale insects on citrus, Chipman points out.

It also gives useful control of aphids and certain other insects. It is a granular material, readily soluble in water for use as a spray.

# Cosmetic Chemists Set Technical Parley

The spring meeting of the Society of Cosmetic Chemists, set for May 10 in the Commodore hotel, New York, is designed to reflect the increasing scope of cosmetic technology.

Scientists from the cosmetic industry and from allied fields will present seven technical papers. A highlight of the events will be the presentation of the third special award granted by the society for outstanding scientific literature.

The following papers will be presented during the morning session:

"Fundamental and Comparative Actions of Cleansing Creams," by Dr. Albert R. Latvin of Pharmacology Research, Inc.; "Some New Keys to Cosmetic Chemistry."

—Continued on page 63

## Ammonia Plant to Be Built By Chemico for Jap Firm

Chemical Construction Corporation, New York, will design a new ammonia plant for Befu Chemical Co., Ltd., in Japan.

The Befu plant will be built at its factory site toward the southern end of Honshu Island overlooking Befu Harbor. Chemico has contracted to furnish basic engineering services for gas generation facilities, using the Texaco process for the partial oxidation of oil with a capacity that can be expanded for the production of 100 tons per day of ammonia.

## Surfactant Line Increased

A new "J" series has been added to the "Poly-Tergent" line of nonionic surface active agents introduced earlier this year by the industrial chemicals division of Olin Mathieson Chemical Corporation, Baltimore, Md. An outstanding characteristic of the new series is the wide temperature range over which the products are effective.

# Rutgers Conference To Hear Dr. Scheele

A talk on "National Health Progress and Problems" by Dr. Leonard A. Scheele, president of Warner Chilcott Laboratories, Morris Plains, N. J., will highlight the program for the sixth annual Rutgers Pharmaceutical Conference to be held at New Brunswick, N. J., May 8.

The sessions will be opened at 10 a.m. by Robert B. Fiske, vice-president of American Cyanamid Company, Pearl River, N. Y., morning chairman, following a welcome by Dr. Lewis Webster Jones, Rutgers president.

Edward Mogull of Ethical Pharmacy,

—Continued on page 53

# Chemical Stock Seen Even Better Investment Today

The good reputation of chemical stocks today is more justly deserved than at any time since the war. That is the opinion of Francis S. Williams, president of Chemical Fund, Inc.

Mr. Williams points out that new record sales volume of $24.3 billion was achieved by the industry in 1956, and estimates indicate a further gain for 1957. Accelerating research efforts combined with record expansion programs scheduled for 1957 are tangible expression of the industry's confidence in its growth prospects.

Post-war capital expenditures by the industry have totaled more than $12.5 billion including $1,468 million in 1956, and are estimated at $1,750 million for 1957, a 19 percent increase over last year.

The present tight money conditions are expected to have little retarding effect on chemical manufacturers' plans owing to the expanding level of internally generated funds.

The overall profit experience of the chemical industry has been more favorable than that of manufacturers generally, Mr. Williams says. Profit margins before tax of 26 chemical companies and of 200

—Continued on page 43

MEMO FROM: Product Development Committee

TO: Purchasing Department

We approve vitamin A 'Roche' for all uses.
The quality is very high. All types of the
Roche product are completely satisfactory.

Per .....

Both liquid and dry forms of
'Roche' Vitamin A were developed
with your manufacturing problems
in mind. Vitamin A 'Roche' has
8 big advantages:

. Stability . Availability
. Quality . High Potency
. Economy . Palatability
. Uniformity . No "Fishy Burp"

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# CHEMICALS AND RELATED MATERIALS

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# Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, April 12 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

## A

Abies siberica oil, cns. ..... lb. 4.25 - 5.00
Abietic acid, coml., dms., c.l., works lb. .12 - —
dms., l.c.l., ex whse ..... lb. .1490- —
Cryst., dms., c.l., works ..... lb. .06½- —
dms., l.c.l., works ..... lb. .07 - .07½
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld ... lb. .30½- —
bbls., bgs., ton lots, frt. alld. lb. .31½- —
bbls., bgs., smaller lots, frt. alld. lb. .34½- —
USP, bbls., 2,000-lb. lots ..... lb. .79 - —
bbls., smaller lots ..... lb. .80 - .81
Acetic acid, coml. or redist, 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs. 13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs. 14.25 - —
tanks, dlvd. ..... 100 lbs. 10.00 - —
USP, cbys., incl., dlvd. 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .15½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .17 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l. dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd ... lb. .10½- —
dms., l.c.l., dlvd ..... lb. .11½- —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., works ... lb. .45 - —
dms., l.c.l., works ..... lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.22 - 1.24
Acetophenone, cns., dms. ..... lb. 1.21 - 1.85
Tech., dms., l.c.l., works .... lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse ..... lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt. lb. .63 - —
USP, standard, fine, cryst. gran., (30-40 mesh) powd., (60 mesh), bbls., 1,000-lb. lots, same basis lb. .58 - —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40 - —
tanks, frt. alld. E. of Denver lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —

### Acids

Acid quotations, formerly grouped under one heading, are now listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
dms., l.c.l., works ..... lb. .47½- —
tanks, works ..... lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., t.l., frt. equald .... lb. .31 - —
tanks, frt. equald ..... lb. .27 - —
ACTH, cryst., bulk, 1,000 units gram, bots gram. 15.00 - —
Adeps lanae (see Lanolin).

## Abies Siberica Oil—Ammonium Benzoate

Adipic acid, bgs., c.l., dlvd. ..... lb. .32 - —
bgs., l.c.l., dlvd. ..... lb. .34¾- —
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 2.00 - —
powd., 30 mesh., fib., dms. lb. 2.50 - —
dl-Alanine, dms., works ..... lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. ..... lb. .65 - .85
Egg, edible, cryst., powd., bbls. lb. 1.32 - 1.34
flake ..... lb. 1.28 - 1.30
tech., cryst., bbls. ..... lb. 1.08 - 1.10

### Alcohols

Alcohol quotations, formerly grouped under one heading, are now listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldol, 95%, dms., works ..... lb. .23 - —
Denaturing grade, dms. ..... gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .90 - —
fib. dms., l.c.l., dlvd. ..... lb. .95 - 1.05
Aletris root, bgs. ..... lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. N. of Tenn. and N.C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. 2.23 - —
Alkali blue toner, litho flushed, 125-lb. bbls., same basis. lb. 1.23 - —
Alkali blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N.C., S.C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Allethrin, 90%, dms., frt. alld lb. 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld. ..... lb. .95 - 1.10

## Abbreviations

### Used in OPD Market Quotations

| | |
|---|---|
| alld. | allowed |
| amorph. | amorphous |
| AMP | American melting point |
| anhyd. | anhydrous |
| a.p.a. | available phosphoric acid |
| approx. | approximately |
| artif. | artificial |
| ASTM | American Society for Testing Materials |
| Atl. | Atlantic |
| Be. | Baume |
| bbls. | barrels |
| bgs. | bags |
| bls. | bales |
| bots. | bottles |
| b.p. | boiling point |
| b.p.l. | bone phosphate of lime |
| b.r. | boiling range |
| bxs. | boxes |
| C. | centigrade |
| cbys. | carboys |
| CD | completely denatured |
| c.i.f. | cost, insurance, freight |
| cks. | casks |
| c.l. | carlots |
| cns. | cans |
| coml. | commercial |
| conc. | concentrated |
| CP | chemically pure |
| cps. | centipoises |
| cryst. | crystalline |
| cs. | cases |
| ctns. | cartons |
| cyls. | cylinders |
| d- | dextro |
| dbl. | double |
| denat. | denatured |
| dest-dist. | destructively—distilled |
| dl- | dextrolaevo |
| dist. | distilled |
| distr. | distributor |
| djns. | demijohns |
| dlvd. | delivered |
| dms. | drums |
| dom. | domestic |
| E. | east |
| e.p. | end point |
| equald. | equalized |
| exp. | expressed |
| Ext. | external |
| F. | fahrenheit |
| ferment. | fermentation |
| f.f.a. | free fatty acid |
| f.f.c. | free from chlorine |
| fib. | fiber |
| f.o.b. | free on board |
| f.p.a. | free of prussic acid |
| frt. | freight |
| gal. | gallon |
| gran. | granular |
| grd. | ground |
| i&a. | iron and aluminum |
| i.b.p. | initial boiling point |
| imp. | imported |
| incl. | included |
| indust. | industrial |
| kgs. | kegs |
| l- | laevo |
| lacq. | lacquer |
| lb. | pound |
| l.c.l. | less than carlots |
| l.t.l. | less truckload |
| liq. | liquid |
| mfrs. | manufacturers |
| m- | meta |
| m.a.p. | mixed aniline point |
| min. | minimum |
| m.p. | melting point |
| N- | nitrogen |
| n- | normal |
| nat. | natural |
| neut. | neutral |
| NF | National Formulary |
| NNR | New and Nonofficial Remedies |
| No. | number |
| nom. | nominal |
| o- | ortho |
| ord. | ordinary |
| oz. | ounce |
| p- | para |
| Pac. | Pacific |
| pf. | proof |
| phos. | phosphate |
| photo. | photographic |
| pkgs. | packages |
| powd. | powdered |
| precip. | precipitated |
| prod. | producer |
| pt. | point |
| pulv. | pulverized |
| purif. | purified |
| redist. | redistilled |
| refd. | refined |
| refy. | refinery |
| reg. | regular |
| resub. | resublimed |
| ret. | returnable |
| SD | specially denatured |
| s.d. | single distilled |
| S E. | southeast |
| sec. | secondary |
| secs. | seconds |
| s.g. | specific gravity |
| shipt. | shipment |
| soln. | solution |
| s.u. | standard unit |
| syn. | synthetic |
| tanks. | railroad tankcars |
| tech. | technical |
| tert- | tertiary |
| t.l. | truck loads |
| t.w. | tank wagons |
| USP | U. S. Pharmacopoeia |
| vis. | viscosity |
| VM&P | varnish makers & painters |
| W. | west |
| whse. | warehouse |
| w. w. | water-white |

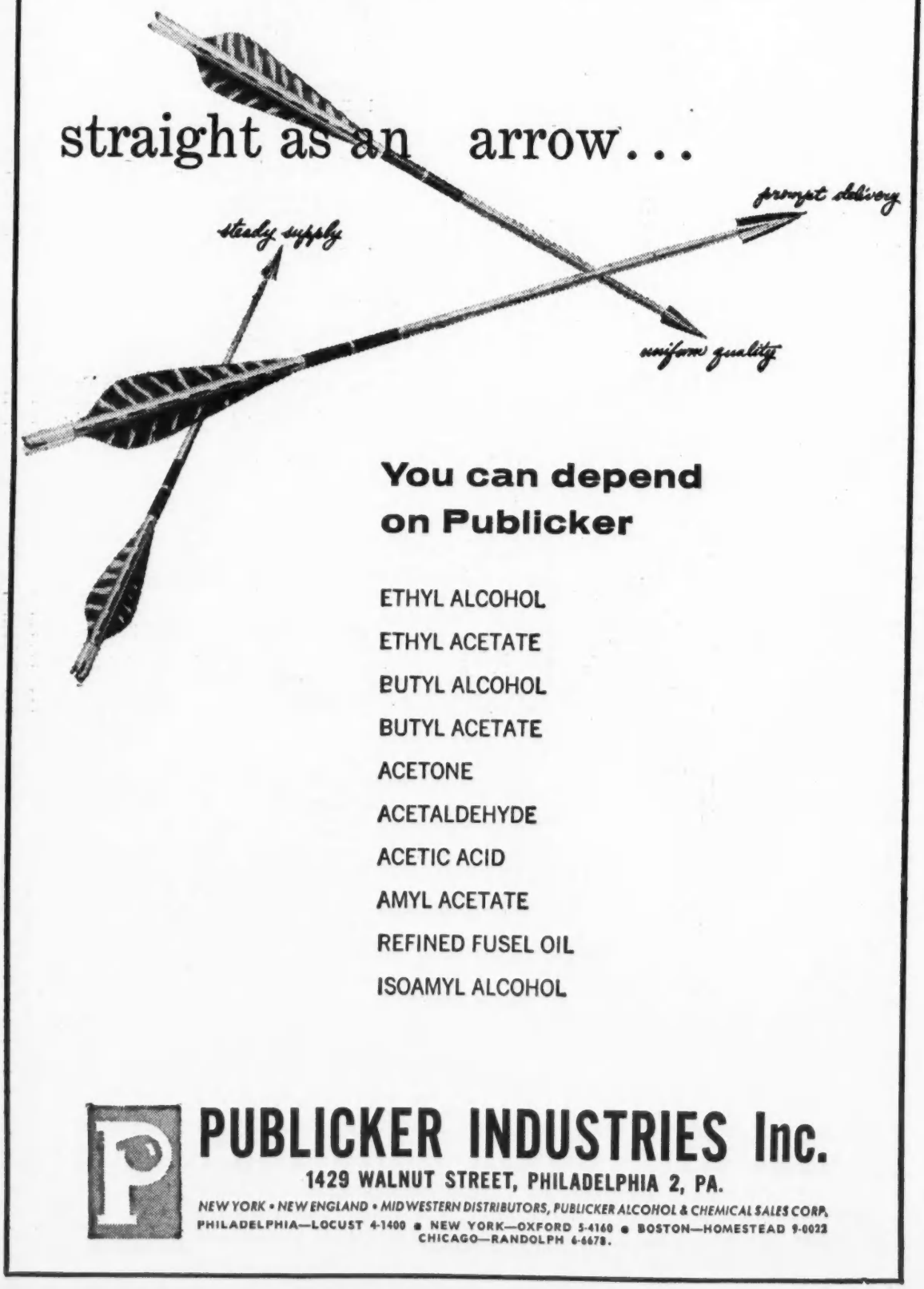
A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l., dlvd. ... lb. .32½- —
dms., l.c.l., dlvd. ..... lb. .33½- —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide, 55-lb. cbys., 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs., works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. ... lb. .17½- —
dms., l.c.l., dlvd. ..... lb. .18½- —
tanks, dlvd. ..... lb. .15 - —
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb. 3.00 - 3.75
NF, bots. ..... lb. 3.25 - 3.75
USP, sweet, cns., dms. ..... lb. 1.45 - 1.50
Aloe, Cape, cs. ..... lb. .50 - —
powd., cs. ..... lb. .65 - —
Curacao, kgs. ..... lb. .60 - —
Aloin, USP, bbls., dms., kgs. ... lb. 3.50 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphaapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works ..... 100 lbs. 5.05 - —
powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt, dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works ..... 100 lbs. 5.30 - —
powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt, dms ..... lb. .20 - .21
hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0455- —
bgs., l.c.l., works ..... lb. .048 - .0755
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works, frt. equald. lb. .16½- —
cryst., dms., c.l., works 100 lbs. 16.00 - —
dms., l.c.l., works .... 100 lbs. 16.50 - —
soln. 32°, cbys., c.l., works . lb. .0445- —
cbys., l.c.l., works ..... lb. .0520- .1290
tanks, works ..... 100 lbs. 3.45 - —
NF, gran., dms., works ..... lb. .29 - .30
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
bgs., l.c.l., works ..... lb. .17¾- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Aluminum formate, basic soln., dms., c.l., works lb. .12 - —
dms., l.c.l., works ..... lb. .12½- —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .032 - —
bgs., 20,000-40,000 lb. lots, same basis lb. .0345- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0445- —
bulk, same basis ..... lb. .0295- —
Aluminum hydroxide, dried, USP XV, fib. dms. works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Gel, pharmaceutical, 14-15% $Al_2O_3$, fib. dms., works lb. .22 - —
fib. dms., contract works. lb. .21 - —
9-9½% $Al_2O_3$, fib. dms., works. lb. .19 - —
fib. dms., contract, works. lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld ... lb. .2710- —
pigs, 10,000-lb. lots, frt. alld. lb. .2500- —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .68 - —
Standard grade, dms ..... lb. .48 - —
Aluminum powder, lining, extra-fine, dms lb. 1.09 - —
Standard grade, dms ..... lb. .78½- —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1% Al, dms lb. .33 - —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Monobasic, ctns., c.l ..... lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Tribasic, ctns., c.l ..... lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Aluminum sulfate, coml., bulk, c.l., works 100 lbs. 1.85 - —
grd., bgs., c.l., works ..... ton. 37.00 - —
lump, bgs., c.l., works .... ton. 40.00 - —
Iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 3.95 - 4.55
USP, gran., dms., works ..... lb. .29 - .30
powd., dms., works ..... lb. .36 - .37
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. ..... oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld. ..... lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.15
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.60 - —
dms., smaller lots, works .. lb. 2.65 - 2.75
Aminoethyl ethanolamine, dms., c.l., dlvd. lb. .475 - —
dms., l.c.l., dlvd. ..... lb. .485 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld ... lb. 1.15 - —
Aminophylline, USP, 100-lb. dms lb. 3.35 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.70 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald .. ton. 80.00 - —
refrigeration tanks works, frt. equald ton. 82.50 - —
Aqueous, tanks, works, anhyd. basis .. ton. 83.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald .. 100 lbs. 8.25 - —
bgs., l.c.l., same basis .. 100 lbs. 9.25 - —
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .41 - —
Ammonium benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld. lb. .80 - —
dms., kgs., smaller lots, frt. alld. .lb. .81 - 1.05

Ammonium biborate, gran., dms., c.l., works ton 319.50 • —
dms., ton lots, ex whse ton 397.00 • —
dms., smaller lots, ex whse ton 402.00 • —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 • —
dms., l.c.l., works 100 lbs. 9.00 • —
Ammonium bichromate, dms., works. lb. .42 • .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., bbls. lb. .45 • —
Powdered ammonium bromide 10c. per lb. higher.
Ammonium carbonate, USP, lump, dms. lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works.. 100 lbs. 5.75 • —
l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., fib. dms lb. .17¼- —
Ammonium citrate, dibasic, bbls. lb. .77 • —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonia acqueous).
Ammonium hydroxide (see Ammonia acqueous).
Ammonium hypophosphate NF, dms. lb. 3.07 • —
Ammonium iodide, NF, dms., bots. lb. 4.26 - 4.38
Ammonium linoleate, 80%, dms., works lb. .50 • .55
Ammonium molybdate, CP, cryst., bbls., 15,000 lbs., works lb. 1.22 • —
bbls., 2,000-lb. contracts, works. lb. 1.23 • —
single bbls., works lb. 1.24 • —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., western works, frt. equald, base price ton 64.00 • —
USP, gran., bbls., dms. lb. .17¼- —
Ammonium nitrate, imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton base price ton 64.00 • —
August discount ton 5.00 • —
western, bgs., c.l., f.o.b. cars, Los Angeles ton 79.69 • —
with dolomite, 20.5% N, bgs., Hopewell, Va ton 51.00 • —
Ammonium oxalate, fine gran., dms. lb. .26½- .31
Ammonium pentaborate, gran., bgs., c.l., works ton 187.50 • —
bgs., ton lots, ex whse ton 273.50 • —
bgs., smaller lots, ex whse ton 278.50 • —
Ammonium pentaborate powder $10 per ton higher.
Ammonium Persulfate, tech., dms., 10-ton lots or more, works. lb. .18 • —
dms., smaller lots, works lb. .20 • .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 • —
Dibasic, NF, V bbls., dms lb. .46 • —
Tech, bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis lb. .10 • —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 • —
bgs., l.c.l., works lb. .20½- —
Ammonium sulfate, coke-oven, bulk, producing ovens, base price ton 32.00 • —
purif., dms., works lb. .10 • .10½
syn., bulk, c.l., works ton 32.00 -42.00
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton 160.00 • —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., dms., c.l., works lb. .20 • —
dms., l.c.l., works lb. .22 • .26
Ammonium thioglycollate, coml., cbys., 100% basis lb. 1.35 • 1.65
Highly purif., cbys., 100% basis. lb. 1.70 • 1.96
Ammonium thiosulfate, cryst., photo grade, fib. dms., frt. alld lb. .65 • —
d-Amphetamine hydrochloride, di-basic bots lb. 18.00 -28.00
dl-Amphetamine hydrochloride, di-basic, bots lb. 4.50 • 6.00
d-Amphetamine hydrochloride, mono-basic, bots lb. 18.00 -28.00
dl-Amphetamine phosphate, bots lb. 4.50 • 6.00
d-Amphetamine phosphate, fib. dms. lb. 18.00 -28.00
d-Amphetamine sulfate, fib. dms. lb. 18.00 -28.00
dl-Amphetamine sulfate, fib. dms, lb. 4.50 • 6.00
Amyl acetate, ex fusel oil, tech., dist, from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 • —
Ex pentane, reg. dms., c.l., dlvd. lb. .18½- —
dms., l.c.l., dlvd lb. .19½- —
tanks, dlvd. lb. .16 • —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .20¼- —
dms., l.c.l., dlvd lb. .21¼- —
tanks, dlvd. lb. .17¾- —
Tech., dms., c.l., dlvd lb. .16½- —
dms., l.c.l., dlvd lb. .17½- —
tanks, dlvd. lb. .14 • —
Amyl alcohol, ex fusel oil (see Fusel oil, refd.).
Amyl alcohol, ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 • —
refd., ACS grade, dms., l.c.l., dlvd lb. .45 • —
Ex-pentane, mixed amyls, dms., c.l., frt. alld lb. .18½- —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 • —
primary, dms., c.l., frt. alld. lb. .19¾- —
dms., l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld. lb. .19 • —
dms., l.c.l., works lb. .20 • —
tanks, works lb. .17 • —
tert-synthetic, dms., c.l., frt. alld. E. lb. .18½- —
dms., l.c.l., frt. alld E lb. .19½- —
tanks, frt. alld. E lb. .16 • —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-Pentanol, dms., c.l., works lb. .65 • —
dms., l.c.l., works lb. .70 • —
tanks, works lb. .60 • —
Amyl cinnamic aldehyde, dms. lb. 1.70 - 2.20
Amyl salicylate, cns., dms lb. .82 - 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
dms., l.c.l., works lb. .50½- —
tanks, works lb. .47 • —
p-tert-Amyl phenol, dms., c.l. works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
tanks, works lb. .25¾- —
Amyl n-butyrate, dms lb. 1.00 - 1.25
Amyris oil, dms lb. 1.25 • —
Anethole, cns., dms lb. 1.60 - 1.80
Tech., dms lb. 1.10 - 1.15
Angelica root, dom., bls lb. .80 • .90
Angelica root oil, bots lb. 85.00 -100.00
Angelica seed oil, bots lb. 80.00 -95.00
Aniline, dms., c.l., frt. alld lb. .22 • —
dms., l.c.l., frt. alld lb. .23 • —
tanks, frt. alld lb. .20 • —
tankwagons, min. 2,000 gals lb. .20½- —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 • —
dms., l.c.l., same basis lb. .35 • —
Anise oil, USP, dms lb. 2.75 • 3.50
Anise seeds, Mexican, bgs lb. .25 • —
Spanish, bgs lb. .25 • —
Syrian, bgs lb. .25 • —
Anisic aldehyde, bots., dms lb. 1.95 • 2.70
o-Anisidine, dms., c.l., frt. alld lb. .80 • —
dms., l.c.l., same basis lb. .82 • —
tanks, same basis lb. .78 • —
p-Anisidine, dms., works lb. .97 • —
Annatto seed, whole, bgs. lb. .15 • .17
Anthracene, 90-95%, bbls., ton-lots, works lb. .83 • —
bbls., smaller lots, works lb. .95 • —
Anthranilic acid, 99%, 150-lb. dms., dlvd. lb. 1.15 • —
Anthraquinone, 99.5%, bbls., c.l., frt. alld. lb. .83 • —
bbls., l.c.l., same basis lb. .86 • —
Electrical grade, bbls., l.c.l., same basis lb. .91 • —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines lb. .33 • —
cs., c.l., mines lb. .33½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .27 • —
bgs., l.c.l., frt. alld. lb. .28½- —
Antimony sulfide, approx. 65%, bgs., dlvd lb. .23 • .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 • —
pails, l.c.l., works lb. .43 • —
Antimony-potassium tartrate, tech., powd., dms lb. .69½- .74½
USP, powd., dms. lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls. lb. 3.50 • —
Apomorphine hydrochloride USP 25-oz. lots oz. 35.60 • —
Apricot kernel oil USP, dms lb. .75 • .90
Arabic gum, amber, sorts, bgs. lb. .21 • .23
USP, powd., bbls. lb. .27 • .29
Areca nuts, powd., bbls. lb. .13 • —
Arecoline hydrobromide, NF, bots., fins oz. 4.50 • 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo. 74.80 • —
Arnica flowers (true Montana), bls. lb. 2.25 • —
Arsenic, crude (95%), bulk, c.l., works lb. .016 • —
bbls., c.l., works lb. .031 • —
Arsenic trioxide, USP, dms. lb. .48 • —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07⅛
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Aresnic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 • —
Light shades, bbls lb. 2.85 • —
Maroon shade, bbls lb. 3.70 • —
Asafetida, cn lb. .40 • —
Powd., bbls., dms lb. .85 • —
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude,
6D, c.l. (30 tons), mines ton 82.00 • —
7D, c.l. (30 tons), mines ton 72.00 • —
7F, c.l. (30 tons), mines ton 68.25 • —
7H, c.l. (30 tons), mines ton 58.00 • —
7K, c.l. (30 tons), mines ton 48.30 • —
7M, c.l. (30 tons), mines ton 42.00 • —
7R, c.l. (30 tons), mines ton 41.00 • —
7RF, c.l. (30 tons), mines ton 42.00 • —
7T, c.l. (30 tons), mines ton 39.00 • —
7TF, c.l. (30 tons), mines ton 42.00 • —
Asbestos prices are in US funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 25-100 kilo lots kilo. 12.00 • —
dms., 10-kilo lots kilo. 12.35 • —
dms., 5-kilo lots kilo. 12.75 • —
bots., 1-kilo lots kilo. 13.00 • —
bots, 500-gram lots kilo. 13.50 • —
Ash black (see Barium sulfide).
Asphalt gilsonite, black jet, bgs., c.l., mines ton 40.00 • —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton 35.00 • —
select, 350° F. fusing pt., bgs., c.l., mines ton 41.00 • —
270°-295° F. fusing pt., bgs. c.l., mines ton 40.00 • —
Manjac, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 • —
emulsion, tanks, tankwagon, refy, gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton 21.00 • —
85-300 penetration, tanks, tankwagon, refy ton 20.00 • —
Aspirin (see Acetylsalicylic Acid).
Atropine, USP, bots oz. 3.90 • 4.50
Atropine sulfate, USP, bots lb. 2.10 • 2.55
Avocado oil, cns lb. 3.25 • —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## B

| | | | |
|---|---|---|---|
| Bacitracin, bulk, 1,000,000,000 or more units | 50,000 units. | .63 | — |
| less than 1,000,000,000 units. | 50,000 units. | .70 | — |
| Balm of Gilead buds, dried, bgs. | lb. | 1.35 | 1.45 |
| Barberry root bark, bgs. | lb. | .28 | .30 |
| Barbital, NF, 100-lb. dms. | lb. | 4.50 | — |
| Barbital sodium, NF, dms. | lb. | 4.75 | — |
| Barium carbonate, precip., bgs., c.l., works | ton. | 106.50 | — |
| bgs., smaller lots, works | ton. | 121.50 | — |
| Barium chlorate, dms., works | lb. | .32 | .41 |
| Barium chloride, anhyd., bgs., c.l., works | ton. | 176.00 | — |
| bgs., l.c.l., works | ton. | 191.00 | — |
| NF, cryst, 100-lb. dms. | lb. | .22 | — |
| Tech., cryst., bgs., c.l., works. | 100 lbs. | 7.00 | — |
| bgs., l.c.l., works | 100 lbs. | 7.75 | — |
| Barium chromate, bgs., frt. equald. | lb. | .33 | — |
| Barium dioxide (see Barium peroxide). | | | |
| Barium hydrate, cryst., bgs., c.l., t.l., frt equald | ton. | 208.00 | — |
| bgs., l.c.l., l.t.l., frt, equald | ton. | 218.00 | — |
| Barium monoxide (see Barium oxide). | | | |
| Barium nitrate, bbls., c.l., t.l., dlvd. | lb. | .16 | — |
| bbls., l.c.l., l.t.l., dlvd | lb. | .17 | — |
| Barium oxide, grd., dms., c.l., t.l., frt. equald | ton. | 275.00 | — |
| dms., l.c.l., l.t.l., frt. equald | ton. | 285.00 | — |
| Barium peroxide, dms., frt. equald. | lb. | .20 | — |
| Barium stearate, ctns., c.l., frt. alld. | lb. | .41 | — |
| ctns., l.c.l., same basis | lb. | .42 | .46 |
| Barium sulfate, tech. (see Barytes and blanc fixe). | | | |
| Barium sulfate, X-ray, dms | lb. | .15 | .15½ |
| Barium sulfide, dms., c.l., works. | ton. | 95.00 | — |
| dms., l.c.l., works | ton. | 105.00 | — |
| Barytes, southern, off-color, bgs., mines | ton. | 25.00 | — |
| 93-75%, bgs., mines | ton. | 25.00 | — |
| water-grd., paper bgs., c.l., St. Louis | ton. | 49.00 | — |
| paper bgs., c.l., ex whse, New York | ton. | 70.85 | — |
| Battery acid, cbys., c.l., works, E. | 100 lbs. | 2.35 | — |
| cbys., l.c.l., works, E | 100 lbs. | 2.65 | 3.45 |
| Bauxite, bulk, mines | ton. | 6.75 | -10.00 |
| Bay leaves (see Laurel leaves). | | | |
| Bay oil, NF, Puerto Rican, 50-55%, cns. | lb. | 2.15 | 3.00 |
| Puerto Rican, 55-60%, cns. | lb. | 2.50 | 3.00 |
| West Indian, 50-55%, cns., dms., | lb. | 1.85 | 2.40 |
| Bayberry wax, bgs | lb. | .45 | .47 |
| Beeswax, crude, African, bgs. | lb. | .67 | .68 |
| Brazilian, bgs | lb. | .69 | .70 |
| Central American, bgs. | lb. | .68 | .69 |
| Chilean, bgs. | lb. | .69 | .70 |
| Refd., USP, bleached, white bricks, 100-lb. ctns. | lb. | .79 | .82 |
| white slabs, 100-lb. ctns. | lb. | .78 | .81 |
| yellow bricks, 100-lb. ctns. | lb. | .73 | .76 |
| yellow slabs, 100-lb. ctns. | lb. | .72 | .77 |
| Belladonna leaf, bls. | lb. | .35 | .37 |
| Belladonna root, bls. | lb. | .45 | .50 |
| Bentonite, dom., 200 mesh, bgs., c.l., mines | ton. | 14.00 | — |
| Imp., Italian, white, high gel., bgs., 5-ton lots, ex whse. | ton. | 84.00 | — |
| bgs., 1-ton lots, ex whse. | ton. | 87.00 | — |
| low gel., bgs., 5-ton lots, ex whse. | ton. | 82.35 | — |
| bgs., 1-ton lots, ex whse. | ton. | 85.35 | — |
| Benzal chloride, cbys., works. | lb. | .44 | — |
| Benzaldehyde, NF, dms. | lb. | .74 | 1.05 |
| Tech., cbys., dms., t.l. | lb. | .43 | — |
| cbys., smaller lots. | lb. | .44 | — |
| Benzene, coaltar, pure or nitration, tanks, works:— | | | |
| Bethlehem, Pa. | gal. | .36 | — |
| Birmingham district | gal. | .36 | — |
| Chicago district | gal. | .36 | — |
| Cleveland district | gal. | .36 | — |
| Geneva, Utah | gal. | .36 | — |
| Johnstown, Pa. | gal. | .36 | — |
| Lackawanna, N. Y. | gal. | .36 | — |
| Lone Star, Tex. | gal. | .36 | — |
| Lorain, Ohio | gal. | .36 | — |
| Middletown, Ohio | gal. | .36 | — |
| Minnequa, Colo. | gal. | .36 | — |
| Philadelphia district | gal. | .36 | — |
| Pittsburgh district | gal. | .36 | — |
| Sparrows Point, Md. | gal. | .36 | — |
| Syracuse, N. Y. | gal. | .36 | — |
| Terre Haute, Ind. | gal. | .36 | — |
| Youngstown, Ohio | gal. | .36 | — |
| Benzene, petroleum, Houston, Tex., tanks | gal. | .36 | .38 |
| Benzene hexachloride, 25% and 99% gamma isomer (see Lindane). | | | |
| Benzene hexachloride, tech., high gamma, dms., c.l., dlvd. | gamma unit-lb. | .0075- | .008 |
| dms., l.c.l., works | gamma unit-lb. | .009 | .0095 |
| low gamma, dms., c.l., dlvd. | gamma unit-lb. | .0075- | — |
| dms., l.c.l., works | gamma unit-lb. | .009 | — |
| Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis | lb. | 1.19 | — |
| bbls., l.c.l., same basis | lb. | 1.21 | — |
| Benzidine sulfate, tech., frt. alld., 100% basis | lb. | 1.21 | — |
| Benzidine yellow, AAA, bbls., dlvd. | lb. | 2.20 | — |
| AAOT, bbls., dlvd | lb. | 2.45 | — |
| Lightfast, bbls., dlvd | lb. | 3.25 | — |
| Benzocaine, dms | lb. | 3.48 | 3.50 |
| Benzoic acid, tech., bbls., dms., 100-lb. lots or more | lb. | .44 | — |
| USP, bbls., dms., 100-lb. lots or more | lb. | .54 | — |
| Benzoin gum, Sumatra, cs. | lb. | .33 | — |

### *Benzol*

Benzol quotations, both coaltar and petroleum, may now be found under Benzene.

| | | | |
|---|---|---|---|
| Benzophenone, dms | lb. | 1.40 | 1.70 |
| Benzotriazole, tech., dms., 1,000-lb. lots, works | lb. | 2.23 | — |
| Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald | lb. | .18 | — |
| cbys., smaller lots, frt. equald. | lb. | .20 | — |
| Benzoyl chloride, cbys., dms., c.l., works, frt. equald. | lb. | .22 | — |
| cbys., l.c.l., same basis | lb. | .23 | — |
| tank trucks, dlvd. Metropolitan area | lb | .21 | — |
| Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works | lb. | .98 | 1.08 |
| Benzyl acetate, f.f.c., cns., dms | lb. | .60 | 1.00 |
| Benzyl alcohol, NF, dms. | lb. | .64 | .79 |
| Tech., dms., dlvd. | lb. | .47½ | .49 |
| Benzyl benzoate, NF, f.f.c., 500-lb. dms | lb. | .62 | — |
| Benzyl chloride, tech., 13-gal cbys., dms., c.l., works, frt. equald | lb. | .23 | — |
| 13-gal cbys., dms., l.c.l., same basis | lb. | .24 | — |
| tank trucks, dlvd. Metropolitan area | lb. | .21 | — |

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

| | | | |
|---|---|---|---|
| Benzyl cinnamate, cns. | lb. | 3.60 | 3.90 |
| Benzyl dimethylamine, dms., works. | lb. | 2.25 | — |
| Benzyl formate, cns. | lb. | 1.80 | 2.10 |
| Benzyl isoeugenol, cns. | lb. | 9.85 | — |
| Benzyl propionate, bots. | lb. | 1.35 | 1.65 |
| Benzyl salicylate, bots. | lb. | 1.60 | 1.85 |
| Benzylidine acetone, bots | lb. | 1.75 | 1.80 |
| Benzylidine chloride, (see Benzal chloride). | | | |
| Berberine bisulfate, cns. | lb. | 35.00 | -36.25 |
| Berberine hydrochloride, bots. | lb. | 35.00 | -36.25 |
| Bergamot oil, nat., NF, Italian, cns. | lb. | 10.25 | -10.50 |
| Betahydroxynaphthoic acid (see b-Oxynaphthoic acid). | | | |
| Betaoxynaphthoic acid (see b-Oxynaphthoic acid). | | | |
| Betaine, anhyd., 10,000-lb. lots, frt. alld. | lb. | 3.00 | — |
| Betaine hydrochloride, 5,000-lb. lots, frt. alld. | lb. | 1.60 | — |
| Betaine monohydrate, 10,000-lb. lots, frt. alld. | lb. | 2.60 | — |
| Betagammapicoline (see b,g-Picoline). | | | |
| Betamethylnaphthalene (see b-Methylnaphthalene). | | | |
| Betanaphthol (see b-Naphthol). | | | |
| Betanaphthylamine (see b-Naphthylamine). | | | |
| Betaphenylethylamine (see b-Phenylethylamine). | | | |
| BHC (see Benzene hexachloride, tech.). | | | |
| Biotin, cryst., bots. | gram. | 10.00 | — |
| Biphenyl (see Diphenyl). | | | |
| Birchtar oil, crude, cns. | lb. | 1.50 | 1.90 |
| Rectified, cns. | lb. | 1.75 | — |
| Bismuth chloride, jars | lb. | 5.11 | — |
| Bismuth hydroxide dms. | lb. | 4.65 | — |
| Bismuth metal, bxs., ton lots | lb. | 2.25 | — |
| Bismuth nitrate, cryst., dms. | lb. | 2.10 | 2.17 |
| Bismuth oxide, anhyd., dms. | lb. | 4.47 | 5.05 |
| Bismuth oxychloride, dms. | lb. | 4.37 | 4.42 |
| Bismuth subcarbonate, USP, dms. | lb. | 3.20 | — |
| Bismuth subgallate, NF, fib. dms. | lb. | 3.15 | — |
| Bismuth subiodide, fib. dms. | lb. | 5.37 | — |
| Bismuth subnitrate, NF, dms. | lb. | 2.65 | — |
| Bismuth subsalicylate, USP, dms | lb. | 3.50 | — |
| Bismuth-ammonium citrate, USP, powd., jars | lb. | 4.22 | — |
| Bisphenol-A, bgs., c.l., t.l., frt. alld. | lb. | .29¾- | — |
| bgs., l.c.l., same basis | lb. | .30¾- | — |
| Blackberry root bark, bls. | lb. | .45 | — |
| Black haw root bark, bls. | lb. | .63 | .65 |
| Black haw tree bark, bls. | lb. | .45 | .50 |

### *Black Pigments*

Black pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

| | | | |
|---|---|---|---|
| Blanc fixe, direct process, bgs., c.l., works. | ton. | 110.00 | — |
| bgs., l.c.l., works | ton. | 120.00 | — |
| bgs., l.c.l., New York whse. | ton. | 155.00 | — |
| Blood, dried, 16-16½% ammonia, unit-ton. | | 5.25 | — |
| high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. | | 6.00 | — |
| Soluble, bgs., c.l. | lb. | .13 | .14 |
| bgs., t.l. | lb. | .15 | .17 |
| bgs., l.t.l. | lb. | .15½- | .35½ |
| Bloodroot, bls. | lb. | .48 | .50 |

### *Blue Pigments*

Blue pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

| | | | |
|---|---|---|---|
| Blue dyes (see Dyes) | | | |
| Blue vitriol (see Copper sulfate). | | | |
| Bois de rose oil, Brazil, dms. | lb. | 3.50 | — |
| Mexican (see Lignaloe wood oil). | | | |
| BON acid maroons, pure, bbls. | lb. | 1.75 | — |
| Resinated, bbls. | lb. | 1.50 | — |
| Bone black, dms., l.c.l., frt. alld. | lb. | .17 | .23¼ |

Pacific coast bone black prices 2c. per lb. higher.


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Bonemeal, steamed, works, E...ton.60.00 - —
Bone oil, dms., works.....lb. .65 - .70
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99%, bgs., c.l., works..ton.83.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.137.25 - —
bgs., smaller lots, same basis..ton.142.25 - —
bulk, c.l., works.....ton.74.00 - —
Tech., cryst., 99½%, bgs., c.l., works..ton.71.00 - —
bgs., ton lots, ex whse. New York or Chicago ....ton.125.25 - —
bgs., smaller lots, same basis..ton.130.25 - —
gran., decahydrate, 99½%, bgs., c.l., works..ton.45.00 - —
bgs., ton lots, ex whse. New York or Chicago ....ton.99.25 - —
bgs., smaller lots, same basis..ton.104.25 - —
bulk, c.l., works.....ton.38.50 - —
pentahydrate, 99%, bgs., c.l. works..ton.60.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.114.25 - —
bgs., smaller lots, same basis..ton.119.25 - —
bulk, c.l., works.....ton.53.50 - —
powd., bgs., c.l., works....ton.50.00 - —
bgs., ton lots ex whse. New York or Chicago.....ton.104.25 - —
smaller lots, same basis...ton.109.25 - —
USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt..lb. .18 - .24
bgs., l.c.l., same basis.....lb. .19 - .26
Boric acid, tech., 99.9% cryst., bgs., c.l., works..ton.129.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.184.25 - —
bgs., smaller lots, same basis. ton.189.25 - —
dms., c.l., works.....ton.153.50 -173.50
dms., ton lots, ex whse. New York or Chicago....ton.208.75 -228.75
dms., smaller lots, same basis. ton.213.75 -233.75
99.9% gran., bgs., c.l., works.ton.104.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.159.25 - —
bgs., smaller lots, same basis. ton.164.25 - —
dms., c.l., works.....ton.128.50 -148.50
bgs., ton lots, ex whse. New York or Chicago.....ton.183.75 -203.75
dms., smaller lots, same basis. ton.188.75 -208.75
bulk, c.l., works.....ton.98.00 - —
Boric acid, tech., 99.9% powd., bgs., c.l., works..ton.109.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.159.25 - —
bgs., smaller lots, same basis. ton.164.25 - —
dms., c.l., works.....ton.133.50 -153.50
bgs., ton lots, ex whse., New York or Chicago.....ton.188.75 -208.75
bgs., smaller lots, same basis. ton.193.75 -213.75
USP boric acid $25 per ton higher.
Borneol, cns.....lb. 2.50 - 4.50
Boron trifluoride gas, cyls, truckload, works..lb. .62 - —
cyls., l.t.l., works.....lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls.....lb. 1.76 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies..lb. .33 - —
cs., l.c.l., same basis.....lb. .35 - .40
ret. dms., c.l., t.l., dlvd. E. of Rockies..lb. .32 - —
ret. dms., l.c.l., same basis..lb. .32 - .34
tanks, same basis.....lb. .23½- —
Bromochloromethane, dms., c.l., frt. equald..lb. .48 - —
dms., l.c.l., same basis.....lb. .50 - —
tanks, same basis.....lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys..lb. 1.80 - 1.90
Bromstyrol, bots.....lb. 5.40 - 5.70
Brucine, cns., 100-oz. lots.....oz. .15 - .20
Brucine sulfate, NF, cns., 100-oz. lots..oz. .12 - .18
Buchu leaves, bls.....lb. 1.30 - —

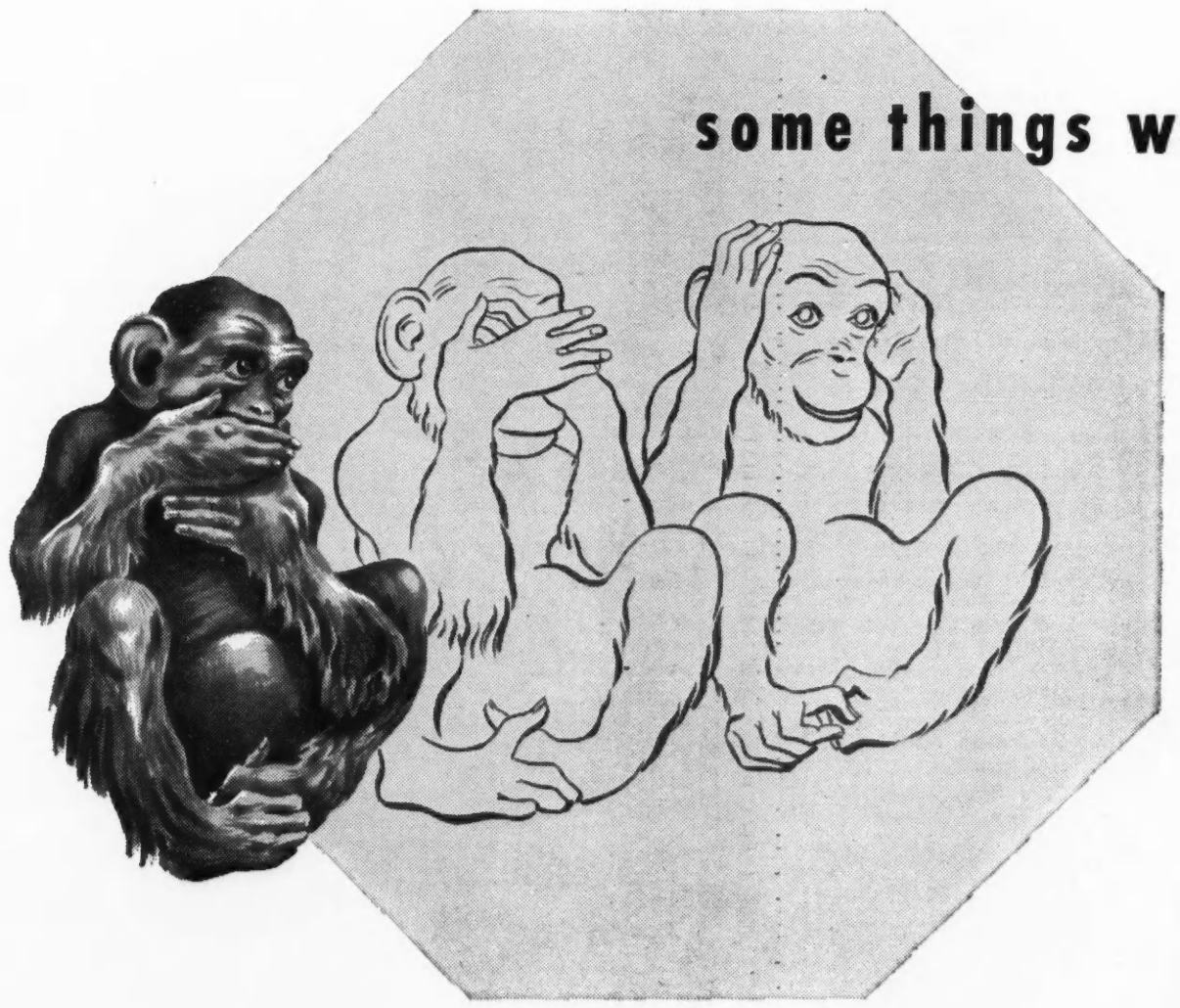
### Brown Pigments

Brown pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd., cyls., c.l., refy..lb. .21 - —
cyls., l.c.l., refy.....lb. .22 - —
tanks, contract, refy.....lb. .14¾- .15
Butane, indust., tanks, group 3..gal. .05 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld..lb. .16½- —
dms., l.c.l., same basis.....lb. .17½- —
tanks, same basis.....lb. .14 - —
Syn., dms., c.l., dlvd. E.....lb. .16½- —
dms., l.c.l., same basis.....lb. .17½- —
tanks, same basis.....lb. .14 - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E..lb. .13½- —
dms., l.c.l., same basis.....lb. .14¼- —
tanks, same basis.....lb. .11¾- —
Butyl alcohol, ferment, dms., c.l., frt. alld..lb. .16½- —
dms., l.c.l., frt. alld.....lb. .17½- —
tanks, frt. alld.....lb. .14 - —
Syn., dms., c.l., dlvd.....lb. .16½- —
dms., l.c.l., dlvd.....lb. .17½- —
tanks, dlvd.....lb. .14 - —
sec-Synthetic, dms., c.l., dlvd..lb. .14½- —
dms., l.c.l., dlvd.....lb. .15½- —
tanks, dlvd.....lb. .12 - —
tert-Synthetic, dms., c.l., frt. alld. lb. .14 - —
dms., l.c.l., frt. alld.....lb. .15 - —
tanks, frt. alld.....lb. .12 - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works..lb. .37½- —
dms., l.c.l., works.....lb. .38¼- —
Butyl ether, dms., c.l., works....lb. .33 - —
dms., l.c.l., works.....lb. .33¾- —
tanks, works.....lb. .31 - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies..lb. .42½- —
dms., l.c.l., same basis.....lb. .43½- —
tanks, same basis.....lb. .40 - —
Butyl laurate, dms., works.....lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works..lb. .55 - —
dms., l.c.l., works.....lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works..lb. .32 - —
Butyl phenylacetate, dms.....lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi.....lb. .26 - —
dms., l.c.l., same basis.....lb. .26½- —
Butylamine (see Mono-, Di- and Tributylamine).
6-tert-Butyl-m-cresol, dms., c.l., works..lb. .55 - —
dms., l.c.l., works.....lb. .56 - —
tanks, works.....lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works. lb. .27½- —
bgs., l.c.l., works.....lb. .28½- —
Butyraldehyde, dms., c.l., dlvd..lb. .22 - —
dms., l.c.l., dlvd. .....lb. .23 - —
tanks, dlvd.....lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald..lb. .34 - —
dms., l.c.l., same basis.....lb. .34½- —
tanks, same basis.....lb. .32½- —
Butyric ether (see Ethyl butyrate).

## C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies..lb. 6.60 - —
Light shade, bbls., same basis..lb. 6.20 - —
Medium shade, bbls., same basis. lb. 5.50 - —
Medium light shade, bbls., same basis..lb. 5.10 - —
Orange-red shade, bbls., same basis..lb. 4.40 - —
Cadmium CP yellow, all shades, bbls., frt. alld. E. of Rockies. lb. 2.85 - —
Cadmium iodide, 25-lb. fib. dms..lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd..lb. 1.70 - —
Cadmium-mercury lithopone orange, deep shade, bbls..lb. 1.78 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis..lb. 2.40 - —
Light shade, bbls., same basis..lb. 1.95 - —
Medium shade, bbls., same basis. lb. 2.25 - —
Medium light shade, bbls., same basis..lb. 2.10 - —
Cadmium-selenide lithopone orange, deep shade, bbls., frt. alld. E. of Rockies..lb. 2.00 - —
Light shade, bbls., same basis..lb. 1.80 - —
Cadmium-selenide lithopone red, dark shade, bbls., frt. alld. E. of Rockies..lb. 3.46 - —
Light shade, bbls., same basis..lb. 2.14 - —
Maroon shade, bbls., same basis. lb. 3.35 - —
Medium shade, bbls., same basis. lb. 2.67 - —
Medium-light shade, bbls., same basis..lb. 2.34 - —
Orange-red shade, bbls., same basis..lb. 1.80 - —
Cadmium-selenide lithopone yellow, all shades, bbls., frt. alld. E. of Rockies..lb. 1.15 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more..lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more..lb. 3.00 - —
cryst., hydrous, dms., 100-lb. lots or more..lb. 2.80 - —
USP, syn., cryst., anhyd., dms., 100-lb. lots or more..lb. 3.00 - —
cryst., hydrous, dms., 100-lb. lots or more..lb. 2.80 - —
Cajeput, oil, native, cns.....lb. 1.75 - 3.30
Redist., USP, cns.....lb. 2.25 - 3.40
Calamine, USP, dms.....lb. .34 - —
Calamus oil, bots.....lb.12.00 -20.00
Calciferol, cryst., vials, 1-kilo lots, works..gram. .60 - —
Vials, 25 to 100 gram lots, works..gram. .65 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate, fib. dms., 100 lbs. or more, frt. adjusted....lb. 4.00 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld..lb. .09 - .09½
Calcium bromide, NF, 100 lbs. or more..lb. .97 - —
Calcium carbide, standard generator size, dms., c.l., dlvd..ton.134.40 - —




S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 735 W. DIVISION ST., CHICAGO 10

Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
bgs., l.c.l., same basis lb. .10 - .10½
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works, ton.32.50 - —
bgs., l.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 - —
surface treated bgs., c.l., works, ton.37.50 - —
bgs., l.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 160.00
bgs., l.c.l., works ton.120.00 -175.00
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Gran., purif., dms. lb. .27 - —
Liquor, 40%, tanks, frt. equald. ton.12.50 - —
Pellets, bgs., c.l., works ton.37.80 - —
Powd., bgs., c.l., works ton.37.00 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
USP, gran., dms lb. .32 - —
Calcium chromate, bgs., frt. equald. lb. .29½ - .30
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 2.95 - —
Calcium gluconate, AA, bbls., dms. lb. .74 - 76
USP, bbls., dms lb. .67 - .69
Calcium hydride, lump, dms., works, lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs.22.95 -25.10
100-lb. dms., same basis dm.30.80 -34.50
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
smaller lots, works lb. .41 - .48
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .27¼ —
Calcium pantothenate, dms., bots., frt. adjusted gram. .045 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms lb. .74 - —
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs 7.75 - —
bgs., l.c.l., frt. equald 100 lbs 8.50 - —
Feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 -83.25
bgs., l.c.l., frt. equald ton.89.55 -93.25
19% P, c.l., works, Tex. Cit. ton.76.00 - —
21% P, bgs., c.l., t.l., frt. equald ton.94.50 - —
bgs., l.c.l., frt. equald ton.99.50 -104.50
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.20 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs.10.50 - —
Calcium phytate, bgs., works lb. .50 - —
Calcium resinate, precip., dms., frt. alld., works lb. .30½- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum).
Calomel, USP, powd., dms lb. 5.42 - —
Camphene, 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.68 - 3.70
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .85 - .90
Syn., tech., 1 bbl. or more lb. .48 - —
Syn., USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
tins, 1,000-lb. lots lb. .91 - —
tins, smaller lots lb. .92 - —
Camphor oil, sassafrassy, dms lb. .28 - .35
White, dms lb. .29 - —
Canada balsam (see Fir balsam).
Cananga oil, native, cns lb. 7.75 - —
Rectified, cns. lb. 9.75 - —
Candelilla wax, crude, bgs. lb. .66 - .68
Refd., bgs lb. .71 - .73
Tech., bgs lb. .66 - .67
Powdered Candelilla wax, 20 to 100 mesh, 7c. higher.
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs. lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs. lb. 4.35 - 4.40
Caprie acid, dms lb. .25 - .27
Caprvl alcohol, 85%, dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec., 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½- —
Caprylic acid, dms lb. .25 - .27
Capsicum (see Pepper, red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleo resin, NF, from dom. pepper, dms lb. 4.50 - 5.25
NF, from African pepper, dms lb. 4.75 - 5.00
Caraway seed, Dutch, bgs lb. .17 - —
Caraway oil, NF, cns lb. 3.65 - 4.00
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
bgs., l.c.l., works lb. .1225- —
Furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works, lb. .0750- —
bgs., c.l., works lb. .0790- —
bgs., l.c.l., dlvd or whse lb. .122 - .123
high modulus, bgs., c.l., works, lb. .0550- —
ctns., l.c.l., whse lb. .0950- —
semi-reinforcing, bgs., c.l., works, lb. .0450- —
bgs., ctns., l.c.l. whse lb. .0850- —
Pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd or whse. lb. .78 - —
medium color uncompressed, bgs. c.l., works lb. .12 - —
bgs., l.c.l., dlvd or whse lb. .19 - —
Carbon dioxide, indust., wholesale, bulk, dlvd. Metropolitan area ton.73.00 -115.00
cyls., same basis lb. .08 - .09
Solid, wholesale, same basis lb. .035 - .040
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
55-gal. dms., l.c.l., same basis lb. .08½- .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
5-gal. dms., less than 30 dms., same basis lb. .16 - —
tanks, dlvd. lb. .05½5- —
Carbon tetrachloride, CP, consumers, dms., c.l. frt. alld lb. .12¾- —
l.c.l., frt. alld lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¾- —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots lb. 38.00 -40.50
Cardamom seed, bleached, "A" lb. 3.20 - —
Bleached, "B" lb. 3.10 - —
Decorticated, Ceylon, cs lb. 3.60 - —
Guatemalan, cs lb. 3.00 - —
Green, Alleppey, bgs lb. 2.15 - —
Ceylon, bgs. lb. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more dlvd lb. 16.80 - —
bulk, smaller lots, dlvd lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .68 - .69
North country No. 2, crude, bgs., ton lots lb. .77 - .78
refd., pure, ton lots lb. .89 - .90
North country No. 3, Ceara, crude, bgs., ton lots lb. .71 - .72
Ceara, refd., pure bgs., ton lots, lb. .80 - .82
Ceara, tech., bgs., ton lots lb. .73 - .75
Parnahyba, crude, bgs., ton lots, lb. .72 - .73
Parnahyba, refd., pure, bgs., ton lots lb. .80 - .82
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.37 - 1.39
Parnahyba, bgs., ton lots lb. 1.39 - 1.41
Powdered carnauba wax, 20 to 100 mesh, 7c. higher.
Carotene, tech, 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram. .263 - —
Tech., in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd. million units. .21 - —
b-Carotene, in vegetable oil, 400,000 A units per gram, cns. gram. .084 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. gram. .35 - —
Carvol, bots lb. 4.50 - 8.00
Cascara sagrada bark, bulk lb. .36 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
Dom., edible, acid precip., 80 mesh bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb. .22 - .22½
New Zealand, duty paid lb. .25 - .26
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.73
Cassia, Batavia, "A," bls. lb. .22 - —
"B" lb. .21 - —
"C" lb. .20 - —
Corinje, "A" lb. .20½- —
"B" lb. .19½- —
"C" lb. .18 - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor beans, bgs., f.o.b. Brazil. ton.180.00 Nom.


# ve ust don't talk about!

And our secrets multiplied ten years ago when we joined forces with *The New York Quinine & Chemical Works, Inc.*

For one thing, one major area of their operation is wholly restricted by Federal regulation.

For another, we can only report in general terms that *many* famous pharmaceuticals and unusual organic and inorganic chemicals are produced regularly in NYQ plants . . . *in strict confidence!* The versatility of NYQ technical staffs and facilities makes custom manufacturing a natural. So, if you want to market a product without investing in specialized facilities, talk to NYQ about it!

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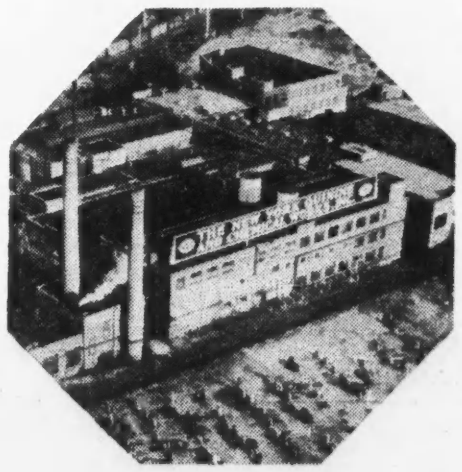
We're proud to be associated with NYQ and are sorry we're not permitted to tell you more about them. But if you don't already know this fine company, you should. They'll be happy to meet you.

PENICK

*Manufacturers of Fine Chemicals and Drugs*



## Castor Oil—Chrome Yellow

| | | | |
|---|---|---|---|
| Castor oil, dom., blown, dms., c.l. | lb. | .2850- | — |
| dms., l.c.l. | lb. | .2950- | — |
| dehydrated, bodied, dms., c.l. | lb. | .3010- | — |
| dms., l.c.l. | lb. | .3110- | — |
| tanks | lb. | .2810- | — |
| unbodied, dms., c.l. | lb. | .2860- | — |
| dms., l.c.l. | lb. | .2960- | — |
| tanks | lb. | .2650- | — |
| hydrogenated, bgs., ton lots | lb. | .3375- | — |
| bgs., l.c.l., dlvd. | lb. | .3575- | — |
| No. 1, dms., c.l. | lb. | .2500- | — |
| dms., l.c.l. | lb. | .2600- | — |
| tanks | lb. | .2300- | — |
| No. 3, tech., dms., c.l. | lb. | .2350- | — |
| dms., l.c.l. | lb. | .2450- | — |
| tanks | lb. | .2150- | — |
| Refd. and deodorized, dms., c.l. | lb. | .2950- | — |
| dms., l.c.l. | lb. | .3050- | — |
| USP, dms., c.l. | lb. | .2650- | — |
| dms., l.c.l. | lb. | .2750- | — |
| tanks | lb. | .2450- | — |
| Imp., No. 1, Brazilian, tanks | lb. | .20¾- | .21 |
| Castor oil, sulfonated, 50%, dms., works | lb. | .15¼- | .15½ |
| 75%, dms., works | lb. | .20 - | .20½ |
| Castor oil acids, dehydrated, dms. | lb. | .44¼- | .46¼ |
| split, dms | lb. | .37¼- | .38¼ |
| Castor oil pomace, bgs., c.l., works. | ton. | 45.50 - | — |
| Castoreum, nat., cns. | lb. | 5.25 | -30.00 |
| Syn., cns. | lb. | 9.00 - | — |

| | | | |
|---|---|---|---|
| Catechol, CP, cryst., fib. dms., works | lb. | 2.17½- | — |
| Resub., dms., works | lb. | 4.29½- | — |
| Catnip leaves, Southern, bls. | lb. | .75 - | — |
| Caustic potash (see Potash, caustic). | | | |
| Caustic soda (see Soda, caustic). | | | |
| Cedarleaf oil, USP, XIII, cns., dms. | lb. | 3.75 - | 4.25 |
| Cedarwood oil, cns., dms. | lb. | .65 - | 1.00 |
| Celery seed, French, bgs | lb. | .41 - | — |
| Indian, bgs. | lb. | 21 - | — |
| Celery seed, oil, bots | lb. | 15.00 - | — |
| Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E | lb. | .35 - | .45 |
| Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E | lb. | .545 - | .555 |
| 27% butyryl content, bgs., dlvd. E | lb. | .595 - | .605 |
| 38% butyryl content, bgs., dlvd. E | lb. | .545 - | .555 |
| 50% butyryl content, bgs., dlvd. E | lb. | .585 - | .595 |
| 50% butyryl alcohol, half-second, bgs., dlvd. E | lb. | .545 - | .555 |
| Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more, works, frt. alld | lb. | .55 - | — |
| bgs., smaller lots, same basis. | lb. | .57 - | — |
| Cerium chloride, 48% dms., dlvd | lb. | .30 - | — |
| Cerium hydrate, 74% $CeO_2$, fib. dms., 100-lb. lots or more | lb. | 1.44 - | — |
| 77%$CeO_2$, fib. dms., 100-lb. lots or more | lb. | 1.74 - | — |

| | | | |
|---|---|---|---|
| Cerium oxalate, NF, 48%, bgs., works | lb. | 1.32 - | — |
| Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd | lb. | 1.85 - | 1.98 |
| bgs., smaller lots, dlvd | lb. | 2.03 - | 2.23 |
| Cetyl alcohol, extra fib. cns., 500-lb. lots or more | lb. | .65 - | .72 |
| NF, fib cns., 140-lb. lots or more | lb. | .48 - | — |
| Chalk (see Calcium carbonate). | | | |
| Chamomile flowers, Hungarian style, cs. | lb. | .85 - | .95 |
| Roman, cs. | lb. | 3.00 - | — |
| Chamomile oil, blue, Hungarian, bots | lb. | 225.00 - | — |
| Charcoal, activated, NF, fib. dms., c.l., works | lb. | .25 - | .32 |
| fib. dms., 5-ton lots, works | lb. | .26½- | .32½ |
| fib. dms., smaller lots works | lb. | .27 - | .50 |
| Charcoal, black (see Charcoal, activated). | | | |
| Charcoal, bone (see Bone black). | | | |
| Charcoal, hardwood, bulk, lump, c.l., f.o.b. plant | ton. | 55.00 - | — |
| briquets, c.l., f.o.b. plant | ton. | 80.00 - | — |
| 5-lb. paper bgs., c.l., same basis | ton. | 108.00 - | — |
| 10-lb. paper bgs., c.l., same basis | ton. | 98.00 - | — |
| 25 lb. paper bgs., c.l., same basis | ton. | 88.00 - | — |
| 40 lb. paper bgs., c.l., same basis | ton. | 85.00 - | — |
| Charcoal pinewood, gran., bgs., c.l., works, south | ton. | 57.00 - | — |
| bgs., l.c.l., works, south | ton. | 57.00 | -67.00 |
| lump, bgs., c.l., works, south. | ton. | 53.50 - | — |
| bgs., l.c.l., works, south | ton. | 56.50 | -71.00 |
| bulk, c.l., works, south | ton. | 38.00 - | — |
| bulk, t.l., works, south | ton. | 41.00 - | — |

| | | | |
|---|---|---|---|
| Chenopodium oil, NF, cns. | lb. | 4.50 - | 4.75 |
| Chestnut extract, imp., solid, 60% tannin, bgs., ex dock, plus duty | lb. | .08½- | — |
| powd., 70% tannin, bgs., ex dock, plus duty | lb. | .0959- | — |
| Chicago acid, paste, bbls., frt. alld. | lb. | 3.21 - | — |
| Chinawood oil (see Tung oil). | | | |
| Chloral, tech., 94% min. dms., c.l., works | lb. | .23 - | — |
| dms., l.c.l., works | lb. | .24 - | — |
| tanks, multiple units, 5 cars, works | lb. | .21 - | — |
| Chloral hydrate, USP, jars, 1,000-lb. lots | lb. | 1.00 - | — |
| jars, 500-lb. lots | lb. | 1.03 - | — |
| jars, 100-lb. lots or less | lb. | 1.05 - | — |
| Chloramine T, NF, bbls., works | lb. | .75 - | 1.00 |
| Chlordan, agricultural, dms., c.l., frt. alld | lb. | .65 - | — |
| dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld | lb. | .66 - | — |
| Clarif., dms., c.l., frt. alld | lb. | .69 - | — |
| dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld | lb. | .70 - | — |
| Chlorinated paraffin, 42%, dms., c.l., frt. alld | lb. | .16¼- | — |
| dms., l.c.l., same basis | lb. | .17¼- | — |
| 70%, dms., c.l., same basis | lb. | .18¾- | — |
| dms., l.c.l., same basis | lb. | .19¾- | — |
| Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works | lb. | .60 - | — |
| ctns., l.c.l., works | lb. | .61 - | — |
| 125, 1,000 cps., ctns., c.l., works. | lb. | .70 - | — |
| ctns., l.c.l., works | lb. | .71 - | — |
| Chlorine, liq., cyls., c.l., works, frt. equald | lb. | .10¼- | — |
| cyls., l.c.l., Metropolitan area | lb. | .11¾- | .13 |
| tanks, single units, works, frt. equald 100 lbs. | | 3.15 - | — |
| tanks, multiple units, 5 cars, works, frt. equald 100 lbs. | | 4.05 - | — |
| tanks, multiple units, 3 cars, same basis 100 lbs. | | 4.25 - | — |
| tanks, multiple units, 2 cars, same basis 100 lbs. | | 5.25 - | — |
| tanks, multiple units, 1 car, same basis 100 lbs. | | 7.25 - | — |
| Chloroacetic acid, mono, flake, 99%, dms., c.l. | lb. | .23½- | .25½ |
| dms., l.c.l. | lb. | .24½- | — |
| tech., flake, 96-97%, dms., c.l., frt. equald | lb. | .19 - | — |
| dms., l.c.l., frt. equald | lb. | .20 - | — |
| 4-Chloro-2-aminotoluene, fused, bbls. | lb. | 1.45 - | — |
| m-Chloroaniline, dms., min. 10,000 lbs., or over, frt. alld | lb. | .75 - | — |
| dms., less than 10,000 lbs., same basis | lb. | .80 - | — |
| tanks, same basis | lb. | .73 - | — |
| o-Chloroaniline, dms., c.l., frt. alld. | lb. | .65 - | — |
| dms., l.c.l., same basis | lb. | .67 - | — |
| tanks, same basis | lb. | .63 - | — |
| p-Chloroaniline, dms., c.l., frt. alld. | lb. | .77 - | — |
| dms., l.c.l., same basis | lb. | .79 - | — |
| o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. metropolitan area | lb. | 1.05 - | — |
| dms., l.t.l., same basis | lb. | 1.20 - | — |
| dms., 500 to 1,500 lbs., same basis. | lb. | 2.00 - | — |
| p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works, dlvd. to N. Y. metropolitan area | lb. | 1.95 - | — |
| o-Chlorobenzoic acid, fib. dms., t.l., works | lb. | 1.10 - | — |
| fib. dms., smaller lots, works | lb. | 1.25 - | — |
| p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. | lb. | 2.25 - | — |
| fib. dms., less than 2,000-lbs., same basis | lb. | 2.30 - | — |
| Chloroform, tech., dms., c.l., dlvd. E | lb. | .18 - | — |
| dms., l.c.l., same basis | lb. | .19 - | — |
| tanks, same basis | lb. | .17 - | — |
| USP, dms. | lb. | .30 - | — |
| 2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis | lb. | .81 - | — |
| Powd., dlvd. E., 100% basis | lb. | .86 - | — |
| 4-Chloro-2-nitroaniline, powd., dlvd. E | lb. | .80 - | — |
| o-Chlorophenol, dms., c.l., frt. equald | lb. | .37 - | — |
| dms., l.c.l., same basis | lb. | .38 - | — |
| p-Chlorophenol, dms., c.l., frt. equald | lb. | .37 - | — |
| dms., l.c.l., same basis | lb. | .38 - | — |
| Chloropicrin, coml., bots. | lb. | 1.50 - | — |
| Coml., cyls., 180 lbs., frt. alld | lb. | .95 - | — |
| cyls., 100 lbs., same basis | lb. | .97 - | — |
| cyls., 25 lbs., same basis | lb. | 1.22 - | — |
| Chlorosulfonic acid, dms., c.l., frt. equald | lb. | .0465- | — |
| dms., l.c.l., frt. equald | lb. | .0515- | — |
| tanks, frt. equald | lb. | .0415- | — |
| Chlorosulfonic acid, in stainless steel dms. ½c. per lb. higher. | | | |
| Choline bitartrate, fib. dms., frt. adjusted | lb. | 1.25 - | 1.35 |
| Choline chloride, fib. dms., frt. adjusted | lb. | 1.25 - | 1.35 |
| Choline dihydrogen citrate, fib. dms., frt. adjusted | lb. | 1.25 - | 1.35 |
| Chrome green, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis | lb. | .40 - | .42 |
| blue content 16-30%, bbls., same basis | lb. | .40 - | .42 |
| blue content 31-45%, bbls., same basis | lb. | .41 - | .43 |
| blue content 45-49%, bbls., same basis | lb. | .44 - | .46 |
| Reduced color, 25% | lb. | .19 - | .20 |

Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Jospeh; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

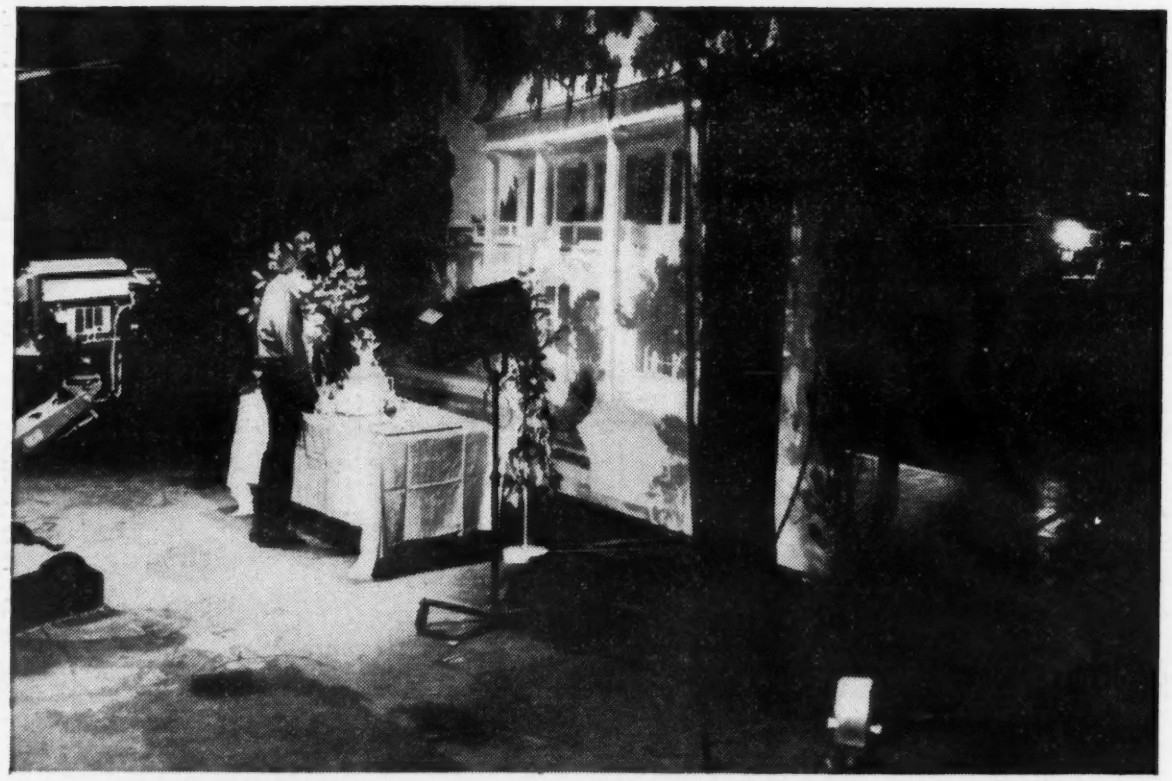
| | | | |
|---|---|---|---|
| Chrome orange, CP, bbls., dlvd. N. of Tennessee and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul | lb. | .35 - | — |

Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

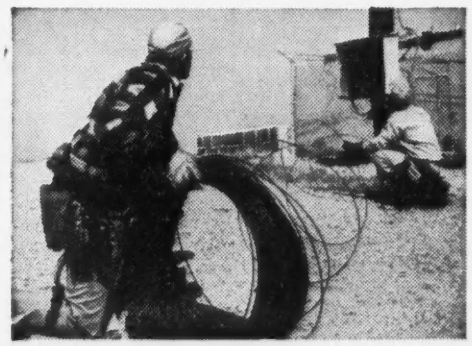
| | | | |
|---|---|---|---|
| Chrome yellow, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island | lb. | .35 - | — |

Chrome yellow price are ½c. higher dlvd. Ala., Fla., Ga., La., (Shreveport 1½c. higher); Miss., N. C., S. C., Tenn.; Dallas, Tex., 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

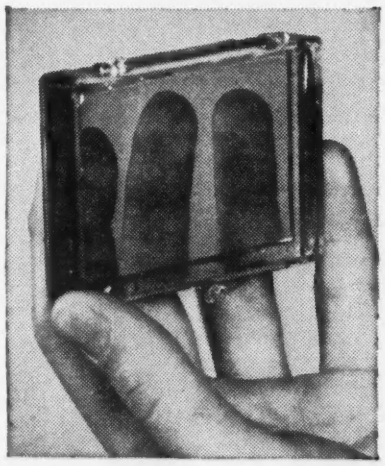

# HOW *HERCULES* HELPS...



**THE WORLD OF MAKE BELIEVE—**
The magic of rear projection on this ethyl cellulose screen quickly transplants a TV or Hollywood studio to any locale in the world. For screens that will reproduce film with clarity and realism, Hercules® ethyl cellulose is selected by the Stewart Trans-Lux Corporation, Torrance, California. In addition, they use it in the manufacture of some of the nation's largest motion picture screens.



**IMPROVE WIRE COATINGS**—Coatings made with Hi-fax®, Hercules new linear polyethylene, are ideally adapted for use in corrosive environments. Hi-fax has excellent electrical properties, high-temperature resistance, and outdoor durability.



**SUPPLY THE PAPER INDUSTRY—**
Hercules is now manufacturing Pamite*, a new pale rosin (X to WG), at its multimillion-dollar tall oil distillation plants. Sizes made from Pamite have superior efficiency, high brightness, low foaming properties, and excellent handling characteristics as well.

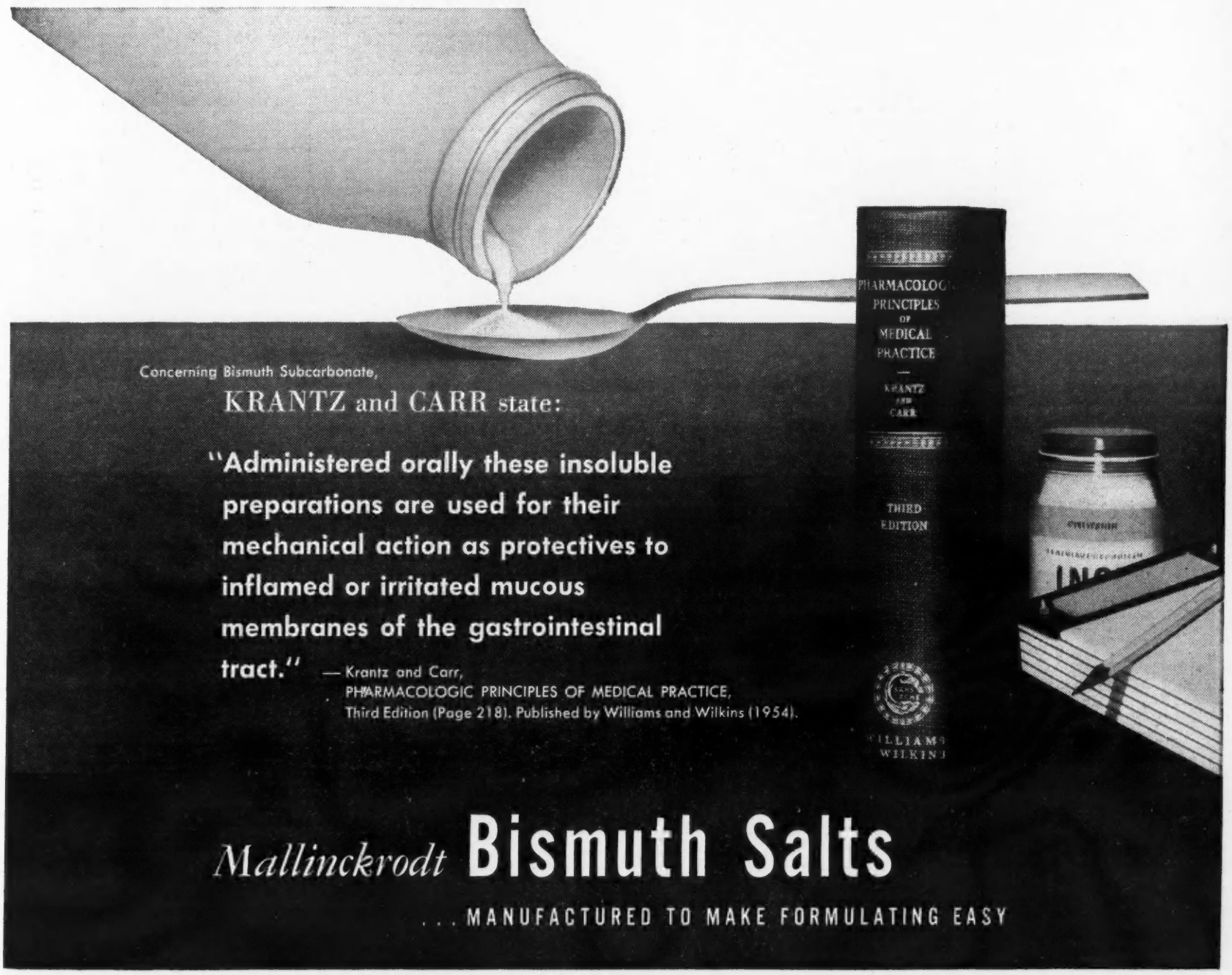
*Hercules trademark

*HERCULES POWDER COMPANY*
INCORPORATED
*951 Market St., Wilmington 99, Del. Sales Offices in Principal Cities*

CHEMICAL MATERIALS FOR INDUSTRY

*HERCULES*

Q57-4




Concerning Bismuth Subcarbonate,

KRANTZ and CARR state:

**"Administered orally these insoluble preparations are used for their mechanical action as protectives to inflamed or irritated mucous membranes of the gastrointestinal tract."** — Krantz and Carr,
PHARMACOLOGIC PRINCIPLES OF MEDICAL PRACTICE,
Third Edition (Page 218). Published by Williams and Wilkins (1954).

# *Mallinckrodt* Bismuth Salts

. . . MANUFACTURED TO MAKE FORMULATING EASY

The precipitation method—exact timing, temperature and concentration—assures controlled bulk and uniform particle size. Mallinckrodt bismuth compounds are extremely fine powders passing through a 325 mesh sieve. The uniform shape and fine particle size result in superior *suspension characteristics.*

**Specify these bismuth compounds** for smoother processing:
Bismuth Subcarbonate USP Powder, Heavy Powder,
Light Powder and Extra Light Powder
Bismuth Subgallate NF Powder
Bismuth Subnitrate NF Powder, Heavy Powder
Bismuth Subsalicylate USP Powder and Special Powder

**FOR QUALITY IN YOUR FORMULATIONS**

SPECIFY *Mallinckrodt*

BISMUTH COMPOUNDS
CALCIUM GLUCONATE
IRON SALTS
IODIDES
PHENOBARBITAL
MAGNESIUM TRISILICATE
MERCURIALS

*Mallinckrodt Chemical Works*

SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO. • 72 GOLD STREET, NEW YORK 8, N. Y.

CHICAGO • CINCINNATI • CLEVELAND • DETROIT • LOS ANGELES • PHILADELPHIA • SAN FRANCISCO

IN CANADA: **MALLINCKRODT CHEMICAL WORKS LIMITED** • MONTREAL • TORONTO

## Chromic Acid—Cottonseed Meal

Chromic acid, 99¾% dms., c.l., works, frt. equald ... lb. .29½- —
dms., l.c.l., dlvd. New York Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works ... lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l., frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld ... lb. .44¾- —
bgs., l.c.l., same basis ... lb. .45½- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
NF, yellow, broken, bgs ... lb. .35 - .40
Cinnamic acid, refd., bots ... lb. 2.50 - 3.50
Cinnamic alcohol, bots ... lb. 2.15 - 2.75
Cinnamic aldehyde, dms ... lb. .95 - 1.25
Cinnamon, Ceylon, No. 2, bgs ... lb. .98 - —
Ceylon, "0000," bgs., afloat ... lb. 1.08 - —
Cinnamon bark oil, bots ... lb. 36.00 -70.00
Cinnamon leaf oil, crude, dms ... lb. 1.60 - 2.00
USP (Cassia), cns., dms ... lb. 10.25 -10.90
Citral, bots., cns ... lb. 4.90 - 5.90
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l lb. .27½ - .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ¼c. higher.
Citronella oil, Ceylon, cns., dms lb. .87 - .90
Java, cns. ... lb. 1.95 - —
Java-type, cns. ... lb. 1.10 - —
Citronellal, bots., dms ... lb. 2.85 - 3.50
Citronellol, bots., dms ... lb. 3.90 - —
Civet, artif., bots ... lb. 13.75 -15.00
Nat., bots. ... oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton. 10.00 - —
purif., bgs., c.l., Tenn ... ton. 20.50 - —
Imp., airfloated, bgs., c.l., Atl. port long-ton. 42.00 -45.00
lump, bulk, Atl. port long-ton. 27.00 -30.20
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, bgs., c.l., Georgia, works. ton. 10.00 - —
bgs., l.c.l., Georgia, works. ton. 15.50 - —
99%, 300 mesh, bgs., c.l., Georgia, works ton. 13.50 -14.50
bgs., l.c.l., same basis ton. 35.00 -36.00
Imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me ... gross ton. 20.00 -35.00
powd., bgs., c.l., ex dock net ton. 50.00 - —
bgs., l.c.l., ex whse ... net ton. 60.00 -65.00
Cleve's acid, mixed, bbls ... lb. 1.05 - —
Clove, Madagascar, bgs ... lb. .42½- —
Zanzibar, bgs ... lb. .47 - —
Clove bud oil, USP, cns., dms ... lb. 2.65 - 2.85
Clove leaf oil, crude, dms ... lb. 1.20 - 1.50
CMC, crude, 96%, low or medium vis., bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .41½- .43
65%, low or medium vis., bgs. or fib. dms., c.l., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., dlvd. E., 100% basis lb. .41½- .43
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs, works, frt. alld lb. .55 - —
bgs., smaller lots, same basis. lb. .57 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for solns., dms., c.l., ex whse gal. .30½- —
dms., l.c.l., ex whse ... gal. .33½- —
tanks, works ... gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .30½- .35
dms., l.c.l., ex whse ... gal. .33½- .39
tanks, works ... gal. .16½- .20½
Coaltar pitch, aluminum, bulk, works ton. 40.00 -42.00
Carbon and indust., bulk, works. ton. 40.00 - —
Core, bulk, works ... ton. 36.50 - —
Fiber, bulk, works ... ton. 44.00 - —

Coaltar pitch, roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton. 39.00 - —
Cobalt acetate, 23.7% Co, dms., dlvd. lb. 1.10 - —
Cobalt blue, genuine, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.90 - —
Cobalt blue dlvd. prices ¼c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Cobalt blue imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co, powd., bgs., dlvd lb. 1.57 - —
Cobalt chloride, 24.2% Co, dms., dlvd lb. 1.05 - —
Cobalt hydrate, 60-61% Co, dms., dlvd lb. 2.20 - —
Cobalt linoleate, fused 8½% Co, dms lb. .68 - —
Liq., 6% Co, dms ... lb. .54¾- —
Cobalt metal, 97-99%, kgs., ex whse. lb. 2.00 - —
Cobalt naphthenate, liq., 6% Co, dms., dlvd lb. .46½- —
Cobalt nitrate, 20.1% Co, bbls., dlvd. lb. .85 - —
Cobalt oxide, black, 72½-73½% Co, kgs lb. 1.52 - —
70-71% Co, kgs ... lb. 1.48 - —
Cobalt phosphate, powd., 32.1% Co, kgs., dlvd lb. 1.43 - —
Cobalt resinate, fused, 3% Co, dms. lb. .28 - —
Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —
Monohydrated, 33% Co, dms., dlvd lb. 1.17 - —
Cobalt tallate, 6% Co, dms., dlvd. lb. .42 - —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz. 13.75 - —
Cocillana bark, bls ... lb. .25 - —
Cocoa butter, bgs. ... lb. .60 - .65
Coconut oil, crude, tanks, New York lb. .12½- —
tanks, Pac. coast ... lb. .11½- —
Refd., Cochin type, dms., tax incl. lb. .19 - .19½
deodorized, dms., tax incl. lb. .21 - .22
Coconut oil acids, dist., dms. ... lb. .23½- .25½
tanks ... lb. .21½- —
Dbl. dist., dms. ... lb. .24½- .26½
tanks ... lb. .22½- —
Cod oil, Newfoundland, dms. ... lb. .11⅝- .11⅞
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. ... gal. 1.45 - 1.55
Cohosh root, black, bls. ... lb. .20 - .22
Blue, bls. ... lb. .20 - .22
Colchicine, USP, bots., cns. ... oz. 29.00 -35.50
Colchicum root, bls. ... lb. .35 - —
Colchicum seed, bgs. ... lb. .60 - —
Colocynth, pulp, bls. ... lb. .55 - —
Colombo root, bls. ... lb. .15 - .16
Collodion, USP, dms. ... lb. .32½- —
Flexible, dms. ... lb. .34 - —
Condurango bark, bls ... lb. .26 - —
Congo copal gum, No. 1, bgs ... lb. .24 - .26
Copaiba balsam, cns., dms. ... lb. .60 - .95
Copaiba oil, cns. ... lb. 1.75 - 2.50
No. 2, bgs. ... lb. .18½- .20
No. 3, bgs. ... lb. .15¾- .17
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works ... lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .34 - —
bgs., l.c.l., works ... lb. .35½- —
Copper chloride, cupric, anhyd., dms., works lb. .43½- .44
Cryst., dihydrate, dms., works. lb. .29½- .30
Cryst., dried, dms., works ... lb. .37¾- .38¼
Copper chloride, cuprous, dms., works lb. .43 - .47
Copper cyanide, tech., dms., 20,000-lb. lots or more lb. .698 - —
dms., 1,000-lb. lots or more lb. .708 - —
dms., smaller lots ... lb. .728 - .748
Copper gluconate, dms ... lb. 3.15 - 3.35
Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .51½- —
dms., l.c.l., same basis ... lb. .52 - —
Copper metal, electrolytic, dlvd. Valley basis lb. .32 - —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —
Copper nitrate, tech., cryst., dms., works lb. .33¼- —
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-1,999-lb. lots, works lb. .50 - —
Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb. lots. lb. .61 - —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .60½- —
Copper oxychloride, dms., c.l., works lb. .52 - —
dms., l.c.l., works ... lb. .53½- .63½
Copper quinolinolate, fib. dms. lb. 4.25 - 4.50
Copper resinate, precip., dms., frt. alld lb. .34 - —
Copper sulfate, CP, gran., dms., works lb. .1980- —
Cryst., 99%, bgs., c.l., works. 100 lbs. 12.90 - —
bgs., l.c.l., same basis 100 lbs. 13.40 -15.90
Monohydrated, 35%, dms., c.l., works 100 lbs. 22.50 - —
dms., l.c.l., works 100 lbs. 23.25 - —
Tribasic, distributors, bgs., c.l., same basis 100 lbs. 28.00 - —
l.c.l., same basis 100 lbs. 29.00 -33.00
Copper undecylenate, dms ... lb. 2.00 - 3.00
Copra, Atl., Gulf ports, c.i.f ... ton. 157.50 - —
Pac. ports, c.i.f ... lb. 152.50 - —
Coriander oil, USP, bots. ... lb. 10.50 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Rumanian, bgs ... lb. .09 - .09¼
Yugoslavian, bgs. ... lb. .08½- —
Corn oil, crude, tanks, works ... lb. .13¾- —
Foots (soapstock), acid 95%, tanks, New York lb. .06½- —
Refd., salad, dms ... lb. .1941- .1960
tanks ... lb. .1741- —
Corn oil acids, dist., dms. ... lb. .16¾- .18½
tanks ... lb. .14¾- —
Corn starch (see Starch, corn).
½-lb. cns ... lb. 1.09 - —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.32 - —
paper bgs., l.c.l. ... 100 lbs. 7.57 - —
Corn syrup, 42°, non-ret. dms., c.l., 100 lbs. 7.30 - —
non-ret. dms., l.c.l. ... 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Costus oil, bots. ... oz. 6.00 - —
Cortisone acetate, USP, bulk ... gram. 3.50 - 3.59
Cottonseed meal, 41% bgs., Memphis ... ton. 55.00 Nom.


# Cut solvent costs

*by switching to* **isobutyl acetate**

**SAVE**
**14¢ A GALLON**
*if you're now using*
**n-butyl acetate**

Isobutyl acetate can be used interchangeably with normal butyl acetate in most applications. In nitro-cellulose lacquer formulations, for example, this substitution can be made without any apparent change in handling characteristics of the lacquer or in the physical properties of the resulting film.

**SAVE**
**5¢ A GALLON**
*if you're now using*
**MIBK**

Replacement of MIBK not only gives you a savings, but also helps you achieve better blush resistance.

**SAVE**
*if you're now using*
**n-butyl acetate** *with*
**sec-butyl acetate** *or*
**n-propyl acetate**

Using isobutyl acetate alone, your cost per gallon will probably be less than any usable combination of these solvents. And, moreover, a storage tank is freed for other purposes.

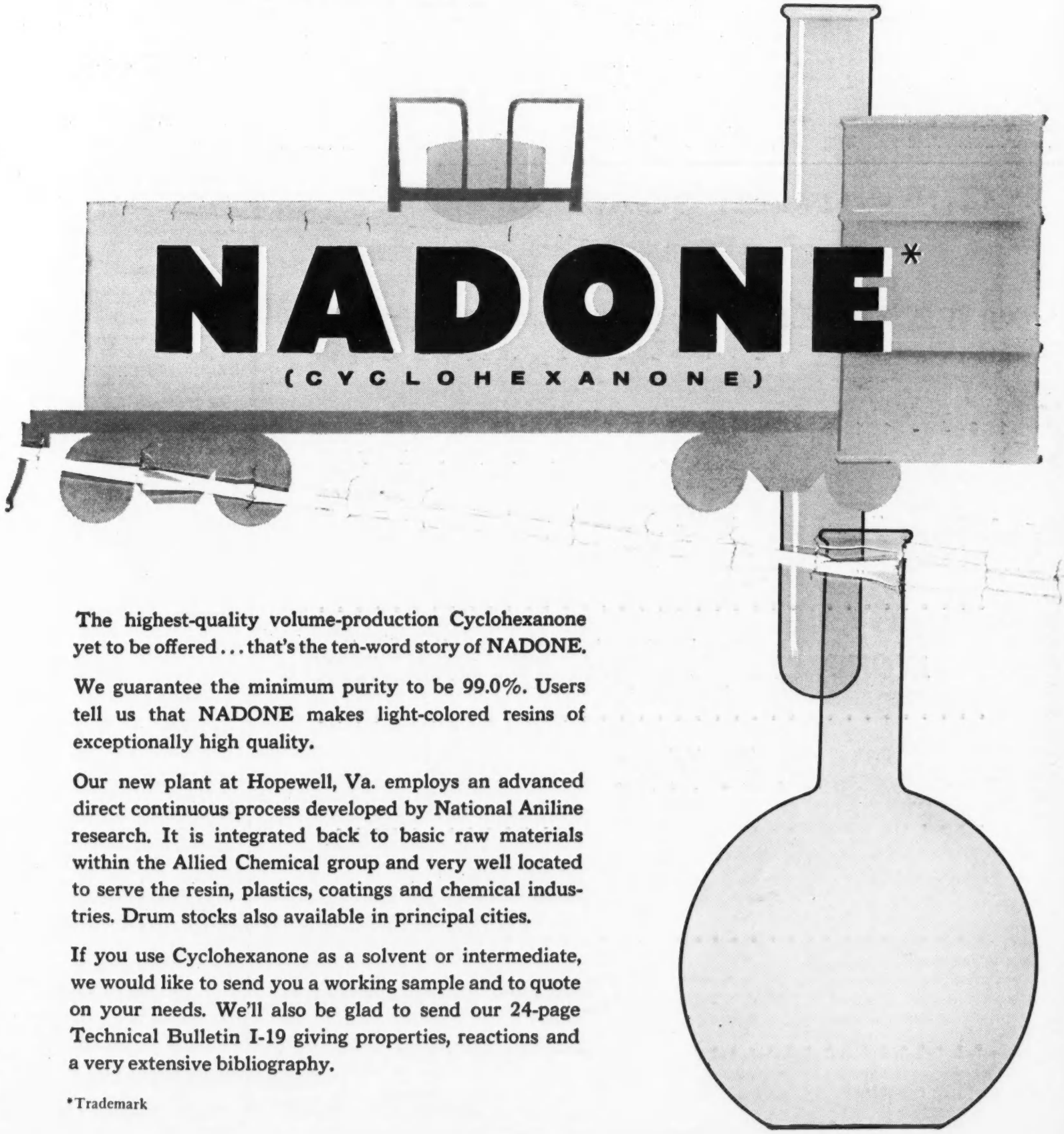
Eastman isobutyl acetate offers other advantages, in addition to lower cost and improved final product. The mild, pleasant odor of this solvent is preferred by most people over the stronger odor of many other solvents. Its price is stable. And because it weighs less per gallon than n-butyl acetate, you save over $1,100 on every 8,000 gallon tank car you buy at current prices.

As a result, isobutyl acetate is finding wide acceptance as a lacquer solvent in its own right, as well as a satisfactory replacement for more expensive solvents. For additional information on this Eastman solvent, contact our nearest sales office or write to EASTMAN CHEMICAL PRODUCTS, INC., Chemicals Division, KINGSPORT, TENNESSEE.

**Eastman**
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of EASTMAN KODAK COMPANY

**SALES OFFICES: Eastman Chemical Products, Inc.,** Kingsport, Tennessee; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston.
**West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

*the highest quality you can get*
*in any quantity you can use!*




The highest-quality volume-production Cyclohexanone yet to be offered . . . that's the ten-word story of **NADONE.**

We guarantee the minimum purity to be 99.0%. Users tell us that **NADONE** makes light-colored resins of exceptionally high quality.

Our new plant at Hopewell, Va. employs an advanced direct continuous process developed by National Aniline research. It is integrated back to basic raw materials within the Allied Chemical group and very well located to serve the resin, plastics, coatings and chemical industries. Drum stocks also available in principal cities.

If you use Cyclohexanone as a solvent or intermediate, we would like to send you a working sample and to quote on your needs. We'll also be glad to send our 24-page Technical Bulletin I-19 giving properties, reactions and a very extensive bibliography.

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**NATIONAL ANILINE DIVISION**

ALLIED CHEMICAL & DYE CORPORATION
**40 RECTOR STREET, NEW YORK 6, N. Y.**

Akron Atlanta Boston Charlotte Chattanooga Chicago Columbus, Ga. Greensboro Los Angeles
New Orleans Philadelphia Portland, Ore. Providence Richmond San Francisco Toronto

## Cottonseed Oil—Denatured Alcohol

Cottonseed oil, crude, tanks, South, East..lb. .13⅜- —
tanks, Valley .....lb. .13⅜- —
tanks, Texas, Lubbock .....lb. .12½- —
tanks, Waco .....lb. .13½- —
Foots (soapstock), acid 95%, tanks, New York..lb. .05 - —
Refd., salad, dms. .....lb. .19 - .19½
tanks .....lb. .17 - —
Cottonseed oil acids, dist., dms..lb. .15¾- .17¾
tanks .....lb. .13¾- —
Cottonseed pitch, raw, dms., works, lb. .03 - .03¼
tanks, same basis .....lb. .02¾- —
Cramp bark, NF, bls.....lb. .85 - .90
Coumarin, NF, cryst, dms.....lb. 3.60 - —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted .gal. .24 - —
soln., 80%, tanks, works..gal. .226 - —
Refd., dms., c.l., works.....gal. .42 - .44
dms. l.c.l. same basis.....gal. .53 - .55
tanks same basis .....gal. .33 - .35
Creosote oil (see Creosote coaltar).
Creosote, wood, beachwood, cbys., dms..lb. 1.60 - 1.65
Hardwood, NF, bots., cbys....lb. 1.30 - —
Pinewood, dms., incl., c.l., works, lb. .0561- —
dms. incl., l.c.l., works.....lb. .0634- —
dms. incl., l.c.l., ex whse, New York..lb. .0745- —
tanks, works .....lb. .0460- —

2,3-Cresotic acid, dms., ton lots, works..lb. .70 - —
dms., smaller lots, works.....lb. .72 - —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald..lb. .1625- —
non-ret. dms., l.c.l., same basis..lb. .1675- —
tanks, same basis.....lb. .143 - —
USP, non-ret. dms., c.l., same basis..lb. .1775- —
non-ret. dms., l.c.l., same basis..lb. .1825- —
tanks, same basis.....lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works, lb. .60 - —
dms., l.c.l., works.....lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald..lb. .1775- —
dms., l.c.l., same basis.....lb. .1825- —
tanks, same basis.....lb. .16 - —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald..lb. .2175- —
dms., l.c.l., same basis.....lb. .2225- —
tanks, same basis.....lb. .20 - —
o-Cresol, m.p. 30.5°C. and over, ret. dms., c.l., frt. equald....lb. .16¾- —
ret. dms., l.c.l., same basis..lb. .17¼- —
tanks, same basis.....lb. .15 - —
m.p. 30°30.49° C., dms., c.l., frt. equald..lb. .16¼- —
ret. dms., l.c.l., same basis..lb. .16¾- —
tanks, same basis.....lb. .14½- —

o-Cresol, m.p., 29°-29.9° C., dms., c.l., frt. equald..lb. .15¾- —
ret. dms., l.c.l., same basis..lb. .16¼- —
tanks, same basis.....lb. .14 - —
m.p., 25°-28.9°C., dms., c.l., frt. equald..lb. .14¾- —
ret. dms., l.c.l., same basis..lb. .15¼- —
tanks, same basis.....lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd..lb. .50 - —
dms., l.c.l., dlvd.....lb. .51 - —
tanks, dlvd. .....lb. .49 - —
p-Cresyl methyl ether, cns.....lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., 50%, 207° C. or above, resin and tricresyl phosphate grade, tanks, frt. equald. lb. 1.10 - —
50%, 204° to 207° C., resin grade, tanks, frt. equald. gal. 1.20 - —
50%, 204° to 207° C., tricresyl phosphate grade, tanks, frt. equald..gal. 1.10 - —
50%, 210° or above, non-resin grade, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 - —
dms., l.c.l., frt. equald..gal. 1.19 - 1.20
tanks, frt. equald.....gal. 1.00 - —
imp., 75% at 215° C. or over, dms., ex whse..gal. .95 - —
Cresylic acid, petroleum, dom., 195° to 214° C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
non-ret. dms., l.c.l., same basis..gal. .82 - .84
tanks, same basis.....gal. .65 - —
200° C. to 232° C., tanks, Wilmington Cal..lb. .65 - .72

Cresylic acid, petroleum, dom., 211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles..gal. .76 - —
non-ret. dms., l.c.l., same basis..gal. .78 - .80
tanks, same basis.....gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal..lb. .62 - .67
245° to 295° C., tanks, Wilmington, Cal..gal. .50 - —
Crotonaldehyde, 91-93%, dms., l.c.l., works..lb. .24¼- .25
Crotonic acid, fib. dms., 200 lbs. or more, works..lb. .50 - —
Cryolite, nat., indust., bgs., c.l., works..100 lbs.13.00 - —
bgs., l.c.l., works.....100 lbs.14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works..lb. .29 - —
Cubeb berries, XX, NF, bgs.....lb. .70 - —
Powd., cs.....lb. .85 - —
Cubeb oil, cns. .....lb 4.10 - 4.25
Cumene, dms., c.l., works.....lb. .12 - —
dms., l.c.l., works.....lb. .14 - —
tanks, works.....lb. .11 - —
Cumin seed, Iranian, bgs.....lb. .18½- —
Moroccan, bgs.....lb. .22 - .23
Turkish, bgs.....lb. N.P.
Cumin oil, bots., cns.....lb. 4.75 - 5.00
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08 - —
Cyanamide, fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract ton.55.00 - —
pulv., 21% N, bgs., works. unit-ton. 2.75 - —
Indust. grade, bgs., c.l., works.ton.75.00 - —
bgs., l.c.l., works.....ton.96.00 - —
6-16 mesh, dms., c.l., works.ton.120.00 - —
dms., l.c.l., works.....ton.140.00 - —
Cyanoacetic acid, tech., bbls....lb. .90 - 1.25
Cyclohexane, 99% tech., dms., c.l., works..gal. .70 - —
dms., l.c.l., works.....gal. .72 - —
tanks, works.....gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt.alld., E..lb. .28 - —
dms., l.c.l., works, same basis.lb. .29 - —
tanks, works, same basis....lb. .24 - —
Cyclohexanone, tech., dms., c.l., works..lb. .32½- —
dms., l.c.l., works.....lb. .35 - —
tanks, works.....lb. .29 - —
Cyclohexene, min. 98% b.r., 82.5° C. 65° C., 360-lb. dms., c.l., works lb. .55 - —
360-lb. dms., l.c.l., same basis. lb. .60 - —
tanks, same basis..... lb. .52 - —
Cyclohexylamine, dms., c.l., works. lb. .48 - —
dms., l.c.l., works.....lb. .50 - —
tanks, works.....lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl.48.00 - —
6-oz. cyls., works..... cyl.12.00 - —
USP, hospitals, cyls., 40-gal. lots. gal. .38 - —
cyls., 100-gal. lots. .....gal. .37 - —
cyls., 200-gal. lots .....gal. .36 - —
Cypress oil, bots .....lb. 5.[illegible] - —

### D

2,4-D tech., bags., dms., c.l., works, frt. equald..lb. .37 - —
bgs., dms., l.c.l., same basis....lb. .42 - .46
2,4-D butyl ester, dms., c.l., works lb. .40 - —
dms., l.c.l., same basis.....lb. .45 - .49
tanks, same basis.....lb. .39 - —
2,4-D isopropyl ester, dms., c.l., works..lb. .40 - —
dms., l.c.l., works.....lb. .45 - .49
tanks, works.....lb. .39 - —
Dammar gum, Batavia, A/E, cs..lb. No stocks.
dust, bgs. .....lb. .16 Nom.
E, bgs. .....lb. .20 Nom.
Dammar gum, East India, batu, bold, bgs..lb. .13¾- .15
nubs and chips, bgs. .....lb. .08¼- .09½
black, bold, bgs. .....lb. .14½- .16½
unscraped, bgs.....lb. .12 - .13½
nubs and chips, bgs.....lb. .11½- .13
pale, chips, bgs. .....lb. .13 - .15
nubs, bgs.....lb. .17¾- .20
Siam, cs. .....lb. .37½- .40
Singapore, No. 1, bgs.....lb. .44¼- .47
No. 2 bgs. .....lb. .32 - .34
No. 3, bgs. .....lb. No stocks
dust, bgs. .....lb. .17 - .19
seeds, bgs. .....lb. No stocks.
Dandelion root, bls. .....lb. .32 - —
DDD, tech., flaks,grd, fib. dms., c.l., works..lb. .45 - —
fib. dms., l.c.l., works.....lb. .46 - —
DDT powder, bgs., cl, works, frt equald..lb. .23 - .27
bgs., smaller lots, same basis..lb. .24 - .28
fib. dms., c.l., same basis.....lb. .24 - .28
fib. dms, smaller lots, same basis lb. .25 - .29
Decyl alcohol, mixed isomers, dms., c.l., dlvd..lb. .23½- —
dms., l.c.l., dlvd.....lb. .24½- —
tanks, dlvd. .....lb. .21 - —
Perfume grade, bots .....lb. 1.75 - 2.00
1-Decanol, tech., dms., c.l., dlvd..lb. .41 - —
dms., l.c.l., dlvd. .....lb. .43 - —
tanks, dlvd. .....lb. .38½- —
Decyl alcohol, normal (see 1-Decanol).
Deertongue leaves, bls. .....lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bags., c.l., t.l., works..ton.49.50 - —
Feed grade, 17% P, paper bgs., c.l., t.l., works..ton.58.00 - —
18% P, paper bgs., c.l. t.l., works..ton.64.10 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common, bbls. .....lb. .10 - .12
Neutral, bbls. .....lb. .21 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms, c.l., dlvd. E. of Rockies..gal. .64½- .66
dms., l.c.l., same basis....gal. .69½- .77
tanks, dlvd., same basis....gal. .48½- .50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies....gal. .66 - —
dms., l.c.l., same basis.....gal. .71 - .77
tanks, same basis .....gal. .50 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies..gal. .65½- —
dms., l.c.l., same basis.....gal. .70½- .76½
tanks, same basis .....gal. .49½- —
SD2B, dms., c.l., dlvd. E. of Rockies..gal. .64 - —
dms., l.c.l., same basis.....gal. .69 - .75
tanks, same basis .....gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies..gal. .63 - —
dms., l.c.l., same basis.....gal. .68 - .74
tanks, same basis .....gal. .47 - —


# MONTROSE
## CHEMICAL COMPANY

104-112 LISTER AVENUE
NEWARK, NEW JERSEY

*tricresyl phosphate*

*mono cresyl diphenyl phosphate*

*D.D.V.P.*

*ethyl silicate*

*diethyl toluamide*

EXCLUSIVE SALES AGENTS

**R. W. GREEFF & CO., INC.**
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

| | | |
|---|---|---|
| Denatured alcohol, SD23A, dms., c.l., dlvd. E. of Rockies | gal. | .655 - — |
| dms., l.c.l., same basis | gal. | .705 - .765 |
| tanks, same basis | gal. | .495 - — |
| SD23H, dms., c.l., dlvd. E. of Rockies | gal. | .66 - — |
| dms., l.c.l., same basis | gal. | .71 - .77 |
| tanks, same basis | gal. | .50 - — |
| SD29, dms., c.l., dlvd. E. of Rockies | gal. | .645 - — |
| dms., l.c.l., same basis | gal. | .695 - .795 |
| tanks, same basis | gal. | .485 - — |
| SD30, dms., c.l. dlvd. E. of Rockies | gal. | .63 - — |
| dms., l.c.l., same basis | gal. | .68 - .74 |
| tanks, same basis | gal. | .47 - — |
| SD35A, dms., c.l., dlvd. E. of Rockies | gal. | .66 - — |
| dms., l.c.l., same basis | gal. | .71 - .77 |
| tanks, same basis | gal. | .50 - — |
| SD40, dms., c.l., dlvd. E of Rockies | gal. | .64 - — |
| dms., l.c.l., same basis | gal. | .69 - .75 |
| tanks, same basis | gal. | .48 - — |

For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.

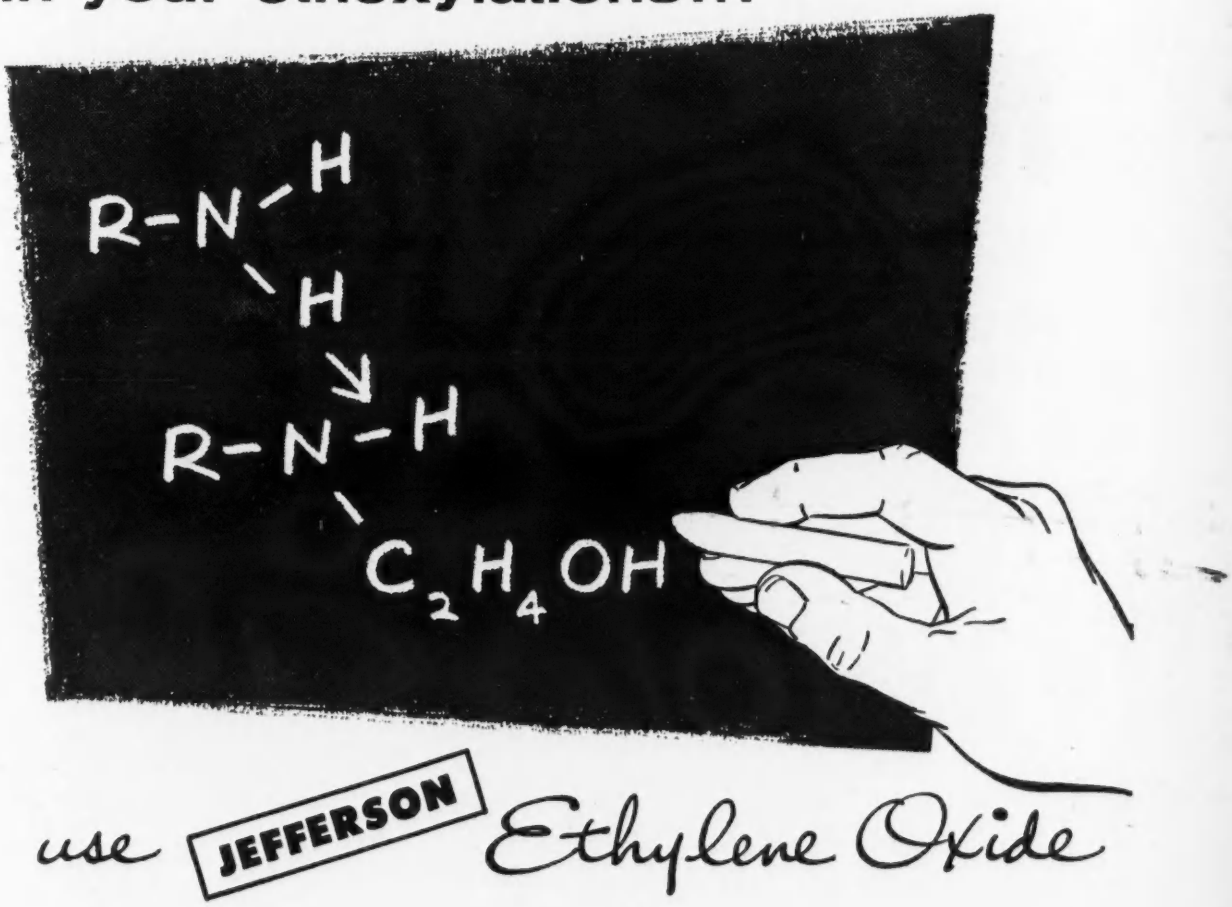
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tank cars is maintained.

| | | |
|---|---|---|
| d-Desoxyephedrine hydrochloride, bots. | lb. | 24.00 -25.00 |
| dl-Desoxyephedrine hydrochloride, bots. | lb. | 6.50 - — |
| Dextrin, corn, gum, paper bgs., c.l. | 100 lbs. | 9.33 - — |
| paper bgs., l.c.l. | 100 lbs. | 9.48 - — |
| canary, dark, paper bgs., c.l. | 100 lbs. | 9.17 - — |
| paper bgs., l.c.l. | 100 lbs. | 9.32 - — |
| light, paper bgs., c.l. | 100 lbs. | 9.07 - — |
| paper bgs., l.c.l. | 100 lbs. | 9.22 - — |
| white, paper bgs., c.l. | 100 lbs. | 8.91 - — |
| paper bgs., l.c.l. | 100 lbs. | 9.06 - — |

Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

| | | |
|---|---|---|
| Dextrin, potato, imp., bgs. | lb. | .10½- .11 |
| Destrose, USP, dms. | lb. | .17¾- — |
| Diacetone alcohol, acetone-free, dms., c.l., dlvd. | lb. | .15 - — |
| dms., l.c.l., dlvd | lb. | .16 - — |
| tanks, dlvd. | lb. | .125 - — |
| Tech., dms., c.l., dlvd. | lb. | .143 - — |
| Dms., l.c.l., dlvd. | lb. | .155 - — |
| tanks, dlvd. | lb. | .12 - — |
| Diacetyl, flavor grade, bots. | lb. | 4.25 - 5.50 |
| Di-sec-amyl phenol, dms., c.l., works | lb. | .32 - — |
| dms., l.c.l., works | lb. | .33 - — |
| tanks, works | lb. | .29½- — |
| Di-tert-amyl phenol, dms., c.l., works | lb. | .32 - — |
| dms., l.c.l., works | lb. | .33 - — |
| tanks, works | lb. | .29½- — |
| o-Dianisidine, fib., dms. | lb. | 2.00 - — |
| Dibenzyl sebacate, dms., c.l., works. | lb. | .89¾- .90 |
| dms., l.c.l., same basis | lb. | .90¼- .91 |
| tanks, same basis | lb. | .88 - — |
| p-Dibromobenzene, bgs., 500-lb. lots. | lb. | .55 - — |
| Dibutyl fumarate, dms., c.l., t.l., frt. alld. | lb. | .33 - — |
| dms., l.c.l., l.t.l., frt. alld. | lb. | .34 - — |
| tanks, frt. alld. | lb. | 30½- — |
| Dibutyl maleate, dms, c.l., t.l., frt. alld. | lb. | .33 - — |
| dms., l.c.l., l.t.l., dms., frt. alld. | lb. | .34 - — |
| tanks, frt. alld. | lb. | .30½- — |
| Dibutyl phthalate, dms., c.l., dlvd. E. | lb. | .32½- — |
| dms., l.c.l., same basis | lb. | .33½- — |
| tanks, same basis | lb. | .30 - — |
| Dibutyl sebacate, dms., c.l., works | lb. | .66 - — |
| dms., l.c.l., works | lb. | .66½- .67 |
| tanks, works | lb. | .64 - .64½ |
| Dibutyl tartrate, dms., works, frt. alld. | lb. | .64 - — |
| Dibutylamine, dms., c.l., dlvd. | lb. | .55½- — |
| dms., l.c.l., same basis | lb. | .56½- — |
| tanks, same basis | lb. | .53 - — |
| Dibutylamine, tech., dms., c.l. | lb. | .91 - — |
| l.c.l. | lb. | .95 - — |
| tanks | lb. | .86 - — |
| 2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd. | lb. | 1.20 - — |
| dms., l.t.l., dlvd. | lb. | 1.24 - — |
| Tech., dms., c.l., dlvd. | lb. | .91 - — |
| dms., l.c.l., dlvd. | lb. | .95 - — |
| Dicapryl phthalate, dms., c.l., dlvd. | lb. | .31 - .32 |
| dms., l.c.l., dlvd. | lb. | .32 - .33 |
| tanks, dlvd | lb. | .27½- — |
| Dicapyrl sebacate, dms., c.l., works. | lb. | .63 - — |
| dms., l.c.l., works | lb. | .63½- .64 |
| tanks, works | lb. | .61 - — |
| Dichlorophenoxyacetic acid (see 2,4-D). | | |
| 2,5-Dichloroaniline, dms., works | lb. | .83 - — |
| o-Dichlorobenzene, dms., c.l., frt. alld. E. | lb. | .12¼- — |
| dms., l.c.l., same basis | lb. | .13¼- — |
| tanks, same basis | lb. | .10¾- — |
| p-Dichlorobenzene, dms., c.l., f.o.b., works | lb. | .12 - .14½ |
| dms., l.c.l., same basis | lb. | .17 - — |
| 1,4-Dichlorobutane, dms., c.l., or t.l., works | lb. | .33½- — |
| dms., l.c.l., or l.t.l., works | lb. | .34 - — |
| tanks, works | lb. | .32 - — |
| Dichlorodiphenyltrichlorothane (see DDT). | | |
| Dichloropentanes, dist., dms., c.l., works | lb. | .05 - — |
| dms., l.c.l., works | lb. | .06 - — |
| tanks, works | lb. | .03 - — |
| Dicyclohexylamine, dms., c.l., works. | lb. | .54 - — |
| dms., l.c.l., works | lb. | .55 - — |
| tanks, works | lb. | .52 - — |
| Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld. | lb. | .58¼- .59 |
| fib. dms., l.c.l., same basis | lb. | .59¼- .60 |
| Didecyl phthalate, dms., c.l., works. | lb. | .34 - — |
| dms., l.c.l., same basis | lb. | .35 - — |
| tanks, same basis | lb. | .31½- — |
| Dieldrin, dms., frt. alld. | lb. | 1.80 - — |
| dms., l.c.l., frt. alld. | lb. | 1.85 - — |
| Diethanolamine, dms., c.l., dlvd. E. | lb. | .27 - — |
| dms., l.c.l., same basis | lb. | .28 - — |
| tanks, same basis | lb. | .24½- — |
| Diethyl barbituric acid (see Barbital). | | |
| Diethyl carbonate, dms., c.l., frt. alld. | lb. | .47 - — |
| dms., l.c.l., same basis | lb. | .48 - — |
| tanks, same basis | lb. | .45 - — |
| Diethyl ethanolamines, dms., c.l., dlvd. | lb. | .69½- — |
| dms., l.c.l., dlvd. | lb. | .70½- — |
| tanks, dlvd | lb. | .67 - — |
| Diethyl oxalate, dms., c.l., frt. alld. | lb. | .42 - — |
| dms., l.c.l., same basis | lb. | .43 - .45 |
| tanks, same basis | lb. | .40 - — |
| Diethyl phthalate dms., c.l., dlvd. | lb. | .30 - .30½ |
| dms., l.c.l., dlvd. | lb. | .31 - .31½ |
| tanks, dlvd | lb. | .27½- .28 |
| Diethyl sulfate, dms., c.l., works | lb. | .19 - — |
| dms., l.c.l., works | lb. | .19¾- — |
| tanks, works | lb. | .17 - — |
| Diethylamine, dms., c.l., dlvd. E | lb. | .51 - — |
| dms., l.c.l., same basis | lb. | .52 - — |
| tanks, same basis | lb. | .48½- — |
| N,N-Diethylaniline, dms., c.l., frt. alld. | lb. | .57 - — |
| dms., l.c.l., same basis | lb. | .58 - — |
| tanks, same basis | lb. | .53 - — |
| Di-2-ethylhexyl adipate (see Dioctyl adipate). | | |
| Di-2-ethylhexyl phthalate (see Dioctyl phthalate). | | |
| Diethylene glycol, dms., c.l., dlvd. E | lb. | .17¾- — |
| dms., l.c.l., same basis | lb. | .18¾- — |
| tanks, same basis | lb. | .15¼- — |
| Diethylene glycol bariborate, dms., l.c.l. | lb. | .21 - — |
| Diethylene glycol diethyl ether, dms., c.l., works | lb. | .47½- — |
| dms., l.c.l., works | lb. | .48¼- — |
| Diethylene glycol monobutyl ether, dms., c.l., dlvd E | lb. | .30¾- — |
| dms., l.c.l., dlvd. E | lb. | .31¾- — |
| tanks, dlvd. E | lb. | .28¼- — |
| Diethylene glycol monobutyl ether acetate, dms., c.l., works. | lb. | .30¼- — |
| dms., l.c.l., works | lb. | .31 - — |
| tanks, dlvd. E | lb. | .28¼- — |
| Diethylene glycol monoethyl ether, dms., c.l., dlvd. | lb. | .22½- — |
| dms., l.c.l., dlvd | lb. | .23½- — |
| tanks, dlvd | lb. | .20 - — |
| Diethylene glycol monoethyl ether acetate, dms., c.l., works. | lb. | .27¼- — |
| dms., l.c.l., works | lb. | .28 - — |
| tanks, dlvd. E | lb. | .25¼- — |
| Diethylene glycol monometnyl ether, dms. c.l., dlvd. | lb. | .20½- — |
| dms., l.c.l. dlvd | lb. | .21½- — |
| tanks, dlvd | lb. | .18½- — |
| Diethylenetriamine, dms., c.l., dlvd. E. | lb. | .44 - — |
| dms., l.c.l., dlvd. E | lb. | .45 - — |
| tanks, dlvd. E | lb. | .41½- — |
| Diethylstilbestrol, USP bots., 10-kilo lots | kilo | 100.00 -147.50 |
| bots., 1-kilo lot | kilo. | 110.00 -152.50 |
| Digitalis leaves, USP, dom., dms. | lb. | 1.20 - — |
| Digitoxin, USP, bots. | gram. | 4.40 - 5.00 |
| Diglycol laurate, dms. | lb. | .32¾- .34 |
| Diglycol stearate, dms., ton lots. | lb. | .26 - .28 |
| Diglycolic acid, bgs., works | lb. | .14 - — |
| Dihexyl sebacate, dms., c.l., works, | lb. | .64 - — |
| dms., l.c.l., works | lb. | .64½- .65 |
| tanks, works | lb. | .62 - — |
| Dihydrazine sulfate, dms., works. | lb. | 1.10 - 1.25 |
| Dihydrostreptomycin hydrochloride, bulk. | gram. | .0850- .0875 |
| Dihydrostreptomymin sulfate, bulk, | gram. | .0850- .0875 |
| 1,2-Dihydroxy anthraquinone, dms., works. | lb. | 2.75 - — |
| 2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms. | lb. | 2.53 - — |
| tech., dms | lb. | 1.09 - — |
| Di-isobutyl ketone, dms., c.l., dlvd. | lb. | .17 - — |
| dms., l.c.l., dlvd | lb. | .18 - — |
| tanks, dlvd | lb. | .14½- — |
| Di-isobutyl phthalate, dms., c.l., dlvd. E. | lb. | .31½- — |
| dms., l.c.l., same basis | lb. | .32½- — |
| tanks, same basis | lb. | .29 - — |
| Di-isobutylene, dms., c.l., dlvd. E. | lb. | .10 - — |
| dms., l.c.l., dlvd. E | lb. | .11½- — |
| tanks, dlvd. E | lb. | .08 - — |
| Di-iso-octyl phthalate, dms., c.l., dlvd | lb. | .31 - — |
| dms., l.c.l., same basis | lb. | .32 - — |
| tanks, same basis | lb. | .28½- — |
| Di-iso-octyl sebacate, dms., c.l., works | lb. | .63½- — |
| dms., l.c.l., works | lb. | .64½- — |
| tanks, works | lb. | .61 - — |
| Di-isopropanolamine, dms., c.l., dlvd. | lb. | .23¼- — |
| dms., l.c.l., same basis | lb. | .24¼- — |
| tanks, same basis | lb. | .20¾- — |
| Di-isopropylamine, dms., c.l., dlvd. E. of Rockies | lb. | .50½- — |
| dms., l.c.l., same basis | lb. | .51½- — |
| tanks, same basis | lb. | .48 - — |
| Dillseed, dewhiskered, bgs. | lb. | .09¼- — |
| Nat., bgs | lb. | .08 - — |
| Dillseed oil, bots. | lb. | 2.80 - 4.25 |
| Dillweed oil, dom., bots., dms | lb. | 3.25 - 4.25 |
| Dimethyl anthranilate, cns. | lb. | 4.35 - 5.10 |
| Dimethyl ethanolamines, anhyd., dms., c.l., dlvd. | lb. | 1.225 - — |
| dms., l.c.l., dlvd. | lb. | 1.235 - — |
| tanks, dlvd | lb. | 1.20 - — |
| 70%, dms., c.l., dlvd., 100% basis, contained amines | lb. | .68½- — |
| dms., l.c.l., dlvd., 100% basis. | lb. | .69½- — |
| tanks, dlvd., 100% basis | lb. | .66 - — |
| Dimethyl hydroquinone, dms. | lb. | 2.20 - 2.23 |
| Dimethyl phthalate, dms., c.l., works. | lb. | .31 - — |
| dms., l.c.l., works | lb. | .32 - — |
| tanks, works | lb. | .28½- — |


in your ethoxylations...




use JEFFERSON Ethylene Oxide

Ethylene Oxide combines with compounds containing labile hydrogens to give 2-hydroxyethyl derivatives.

AMINES and AMIDES react readily at the N-coupled hydrogens. For example, with amines:

* *Reactions proceed under mild conditions which preclude side reactions with solvent water or alcohol.*
* *Alkylamines generally react more readily than arylamines.*
* *Reactions with ammonia and amines are apparently promoted by polar solvents, and by hydroxyethyl reaction products.*

And, for amides:

* *Hydroxyethylation of carboxylic acid amides and sulfonamides is promoted by alkaline substances.*

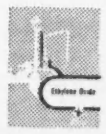
Detailed information on these and other reactions is contained in Jefferson's new technical bulletin *Ethylene Oxide.*

**Jefferson Chemical Company, Inc., Box 303, Houston 1, Texas.**

**Need help in setting up for Ethoxylation?**

In addition to having extensive laboratory experience with ethylene oxide, Jefferson has developed pilot plant and production techniques in the manufacture of Jefferson ethanolamines and other ethylene-oxide-derived chemicals. This practical experience can benefit you through practical time- and cost-saving ideas.

*Write for Jefferson's Ethylene Oxide Bulletin—or call in your Jefferson representative.*



*Essential Chemicals from Hydrocarbon Sources*

Jefferson CHEMICAL COMPANY, INC

HOUSTON • NEW YORK • CHICAGO • CLEVELAND • CHARLOTTE • LOS ANGELES

Ethylene Oxide, Glycols, Dichloride
Ethanolamines
Morpholine
Piperazine
Polyethylene Glycols
Nonyl Phenol
Surfonic® Surface-Active Agents—N Series and TD Series
Ethylene Carbonate and Propylene Carbonate

| | | | |
|---|---|---|---|
| Dimethyl sebacate, dms., c.l., works | lb. | 1.275 | — |
| dms., l.c.l., dlvd | lb. | 1.285 | — |
| tanks, works | lb. | 1.25 | — |
| Dimethyl sulfate, 55-gal. ret. dms., c.l., works | lb. | .15 | — |
| 55-gal. ret. dms., l.c.l., works | lb. | .16 | — |
| 10-gal. ret. dms., l.c.l., works | lb. | .16½ | — |
| Dimethylamine, 25% soln., dms., c.l., frt. equald | lb. | .42 | — |
| dms., l.c.l., frt. equald | lb. | .42½ | — |
| tanks, frt. equald | lb. | .33 | — |
| 40% soln., dms., c.l., frt. equald. | lb. | .39 | — |
| dms., l.c.l., frt equald | lb | .39½ | — |
| tanks, frt. equald | lb. | .33 | — |
| N,N-Dimethylaniline, dms., c.l., frt. alld | lb. | .32 | — |
| dms., l.c.l., frt. alld. | lb. | .33 | — |
| tanks, frt. alld. | lb. | .30 | — |
| N,N-Dimethylformamide, dms., works | lb. | .34 | .39 |
| tanks, works | lb. | .32 | — |
| 2,4-Dinitroaniline, dms., 1,000-lb. lots, frt. equald | lb. | .68 | — |
| dms., smaller lots, frt. equald | lb. | .71 | — |
| Dinitroaniline orange toner, CP bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including Davenport, and E. of Minneapolis, Rock Island, St. Louis, St. Paul | lb. | 1.50 | — |
| m-Dinitrobenzene, 85°C., dms | lb. | .22 | — |
| 89° C., dms | lb. | .24 | — |
| 2,4-Dinitrochlorobenzene, crystallizing at 46¼°C., dms., c.l., frt. alld. E | lb. | .15¼ | — |
| dms., l.c.l., frt. alld. E | lb. | .15¾ | — |
| tanks, frt. alld E | lb. | .15 | — |
| 2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E | lb. | .20¼ | — |
| dms., l.c.l., frt. alld. E | lb. | .20¾ | — |
| tanks, frt. alld. E | lb. | .20 | — |
| 2,4-Dinitrophenol, bbls | lb. | .37 | — |
| 2,4-Dinitrotoluene, oily, dms | lb. | .11 | — |
| Refd., 63°C., dms | lb. | .23 | — |
| Dioctyl adipate, dms., c.l., works | lb. | .42½ | — |
| dms., l.c.l., works | lb. | .43½ | — |
| tanks, works | lb. | .40 | — |
| Dioctyl phthalate dms., c.l., frt. alld | lb. | .30½ | .31 |
| dms., l.c.l., frt. alld | lb. | .31½ | .32 |
| tanks, frt. alld | lb. | .28 | .28½ |
| Dioctyl sebacate, dms., c.l., works. | lb. | .60½ | — |
| dms., l.c.l., works | lb. | .61½ | .62½ |
| tanks, works, dlvd | lb. | .58 | .58½ |
| 1,4-Dioxane, dms., c.l., works | lb. | .28¾ | — |
| dms., l.c.l., works | lb. | .29¼ | — |
| tanks, works | lb. | .27 | — |
| Dip oil (see Tar acid oil). | | | |
| Dipentaerythritol, bgs., l.c.l., works. | lb. | .35 | — |
| Dipentene, dest.-dist., dms., c.l., works | gal. | .47 | — |
| dms., l.c.l. works | gal. | .52 | — |
| dms., l.c.l., ex whse | gal. | .62 | — |
| Steam-dist., dms., c.l., works, south | gal. | .59 | — |
| dms., c.l., dlvd. New York | gal. | .67 | — |
| tanks, works, south | gal. | .45 | — |
| Diphenyl, bbls., c.l., works | lb. | .15 | — |
| bbls., l.c.l., works | lb. | .16 | — |
| Diphenyl in bags ¼c. lower. | | | |
| Diphenyl oxide, perfume grade, cns. | lb. | .56 | .61 |
| Diphenyl phthalate, dms., c.l., works. | lb. | .51¾ | — |
| dms., l.c.l., works | lb. | .53¾ | — |
| Diphenylamine, refd., flake, bgs., c.l., works, frt. equald | lb. | .33 | — |
| bgs., l.c.l., same basis | lb. | .35 | — |
| Refd., fused, tanks, same basis | lb. | .31 | — |
| Tech., fused, tanks, same basis | lb. | .30 | — |
| Diphenylguanidine, bgs., dms., ton lots, frt. alld | lb. | .52 | — |
| bgs., smaller lots, frt. alld | lb. | .53 | — |
| Diphenylhydantoin-sodium USP, dms | lb. | 5.00 | 5.60 |
| Dipropylene glycol, dms., c.l., frt. alld | lb. | .17¾ | — |
| dms., l.c.l., frt. alld | lb. | .18¾ | — |
| tanks, frt. alld | lb. | .15¼ | — |
| Dipropylene glycol methyl ether, dms., c.l., dlvd. E | lb. | .20 | — |
| dms., l.c.l., same basis | lb. | .21 | — |
| tanks, same basis | lb. | .18½ | — |
| Dithiodibenzoic acid, dms., 1,000-lb. lots, works | lb. | 1.45 | — |
| Di-o-tolylguanidine, dms., ton lots, frt. alld | lb. | .62 | — |
| dms., smaller lots, frt. alld | lb. | .63 | — |
| Divi-divi, 45% tannin, bgs., bls., c.l., US ports, ex dock | ton. | 80.00 | — |
| Divinylbenzene, 20-25%, dms., c.l., works, frt. equald | lb. | .20 | — |
| dms., l.c.l., same basis | lb. | .21 | — |
| tanks, same basis | lb. | .19 | — |
| 50-60%, dms., c.l., works, 100% basis | lb. | 1.00 | — |
| dms., l.c.l., works, 100% basis | lb. | 1.05 | — |
| Dodecylbenzene, dms., c.l., frt. alld | lb. | .14 | — |
| dms., l.c.l., same basis | lb. | .15 | — |
| tanks, same basis | lb. | .12 | — |

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb lots, dlvd:—

| | | | |
|---|---|---|---|
| Blue, FD&C, No. 1 | lb. | 15.65 | -17.60 |
| No. 2 | lb. | 15.65 | -17.60 |
| Green, FD&C, No. 1 | lb. | 15.65 | -17.60 |
| No. 2 | lb. | 19.60 | -22.85 |
| No. 3 | lb. | 21.30 | -35.90 |
| Red, FD&C, No. 1, cns | lb. | 5.90 | - 7.85 |
| No. 2 | lb. | 3.30 | - 4.10 |
| No. 3 | lb. | 19.60 | -22.85 |
| No. 4 | lb. | 5.55 | - 7.50 |
| Violet, FD&C, No. 1, cns | lb. | 15.65 | -17.60 |
| Yellow, FD&C, No. 1, cns | lb. | 9.15 | -11.05 |
| No. 5 | lb. | 3.30 | - 4.10 |
| No. 6 | lb. | 3.30 | - 4.10 |

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

| | | | |
|---|---|---|---|
| Black, D&C, No. 1 | lb. | 10.50 | -10.95 |
| Brown, D&C, No. 1 | lb. | 15.65 | -16.10 |
| Green, D&C, No. 5 | lb. | 15.65 | -16.10 |
| No. 6 | lb. | 15.65 | -16.10 |
| No. 7 | lb. | 14.35 | -14.80 |
| Orange, D&C, No. 3 | lb. | 10.50 | -10.95 |
| No. 4 | lb. | 19.60 | -20.05 |
| No. 5 | lb. | 5.25 | - 5.70 |
| Red, D&C, No. 17 | lb. | 10.50 | -10.95 |
| No. 18 | lb. | 23.55 | -24.00 |
| No. 19 | lb. | 15.00 | -15.45 |
| No. 21 | lb. | 3.10 | - 3.60 |
| No. 22 | lb. | 10.50 | -10.95 |
| No. 28 | lb. | 24.20 | -24.65 |
| No. 33 | lb. | 17.00 | -17.45 |
| Violet, D&C, No. 2 | lb. | 15.65 | -16.10 |
| Yellow, D&C, No. 7 | lb. | 10.50 | -10.95 |
| No. 8 | lb. | 10.50 | -10.95 |
| No. 10 | lb. | 13.05 | -13.50 |
| No. 11 | lb. | 13.05 | -13.50 |

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—

| | | | |
|---|---|---|---|
| Blue, Ext., D&C, No. 1, cns | lb. | 15.65 | -16.10 |
| Green, Ext., D&C, No. 1, cns | lb. | 15.65 | -16.10 |
| Red, Ext., D&C, No. 1, cns | lb. | 13.05 | -13.50 |
| Yellow, Ext., D&C, No. 1, cns | lb. | 10.50 | -10.95 |

Dyes, coaltar for general use in cloth dycing (numbers are those of the Colour index scale or prototype) contract, dlvd. No.

| | | | | |
|---|---|---|---|---|
| 20 | Chrysoidine Y, dustless | lb. | .89 | — |
| 27 | Fast light, orange 2G | lb. | 1.29 | — |
| 31 | Phloxine 2G | lb. | 1.05 | — |
| 36 | Yellow 2G | lb. | 1.18 | — |
| 40 | Orange R, extra, conc | lb. | 1.52 | — |
| 57 | Fuchsine 6B | lb. | 1.55 | — |
| 79 | Scarlet 2R | lb. | 1.16 | — |
| 151 | Orange AD | lb. | .79 | — |
| 161 | Orange RR | lb. | .94 | — |
| 176 | Fast red A | lb. | 1.39 | — |
| 179 | Rubine XX, conc | lb. | 1.47 | — |
| 180 | Blue F4B | lb. | 1.31 | — |
| 185 | Brilliant scarlet 3RN, conc. | lb. | 1.20 | — |
| 202 | Chrome blue black R, conc. | lb. | 1.07 | — |
| 203 | Chrome black T | lb. | 1.11 | — |
| 208 | Fast blue SR | lb. | 1.30 | — |
| 216 | Chrome red B | lb. | 1.09 | — |
| 234 | Brown Y | lb. | 1.27 | — |
| 246 | Blue black, extra, conc | lb. | 1.37 | — |
| 275 | Milling red 3R, conc. | lb. | 1.91 | — |
| 289 | Navy blue 3R, conc | lb. | 1.70 | — |
| 299 | Black F, conc | lb. | 2.19 | — |
| 304 | Neutral black 2B, conc | lb. | 2.61 | — |
| 326 | Fast scarlet 4BNC | lb. | 2.12 | — |
| 332 | Bismark brown RX, conc., dustless | lb. | 1.37 | — |
| 365 | Brilliant yellow, conc | lb. | 3.11 | — |
| 382 | Scarlet B | lb. | 2.60 | — |
| 401 | Diazo black BHD | lb. | .93 | — |
| 406 | Blue 2B, extra conc | lb. | 1.53 | — |
| 419 | Red FC | lb. | 1.45 | — |
| 420 | Brown M | lb. | 1.40 | — |
| 448 | Red 4BX conc | lb. | 1.69 | — |
| 518 | Diamine sky blue FF, extra, conc | lb. | 1.95 | — |
| 561 | Brown B | lb. | 2.89 | — |
| 581 | Black EB, 200% | lb. | 1.33 | — |
| 593 | Green BY, conc | lb. | 1.02 | — |
| 596 | Yellow brown K, extra | lb. | 1.26 | — |
| 620 | Yellow 2G | lb. | 1.31 | — |
| 639 | Fast Yellow GG | lb. | 2.32 | — |
| 640 | Yellow XX | lb. | 2.30 | — |
| 655 | Yellow OX | lb. | 2.64 | — |
| 657 | Green V | lb. | 2.73 | — |
| 662 | Brilliant green G | lb. | 3.62 | — |
| 667 | Milling green 6B, conc | lb. | 4.78 | — |
| 671 | Blue EG | lb. | 1.85 | — |
| 681 | Crystal violet powder | lb. | 2.15 | — |
| 698 | Violet 6BN powder | lb. | 2.25 | — |
| 720 | Brilliant blue BBG | lb. | 2.44 | — |
| 729 | Blue B, extra conc | lb. | 3.61 | — |
| 749 | Red BX | lb. | 4.76 | — |
| 800 | Chinoline yellow ZSS | lb. | 2.67 | — |
| 814 | Yellow NN, conc | lb. | 3.67 | — |
| 841 | Safranine GF, extra, conc | lb. | 4.11 | — |
| 860 | Induline base ZM | lb. | 1.07 | — |
| 865 | Nigrosine J | lb. | 4.76 | — |
| 922 | Blue GXX | lb. | 2.22 | — |
| 978 | Black GXCF, conc | lb. | .38 | — |
| 1034 | Alizarine red SC | lb. | 3.31 | — |
| 1054 | Alizarine blue SAPX | lb. | 3.78 | — |
| 1078 | Alizarine green CG, extra | lb. | 3.53 | — |
| 1085 | Alizarine blue black B | lb. | 3.02 | — |
| 1096 | Golden orange GFD, single paste | lb. | 2.58 | — |
| 1099 | Dark blue BO, single paste. | lb. | 2.28 | — |
| 1101 | Jade green N supra, double paste | lb. | 1.55 | — |
| 1106 | Blue RS, double paste | lb. | 3.85 | — |
| 1113 | Blue, BLFD, double paste | lb. | 2.92 | — |
| 1150 | Olive R, Single paste dms., dlvd. | lb. | 1.42 | — |
| 1151 | Brown R, single paste | lb. | 2.29 | — |
| 1171 | Indigo synthetic, 20% paste | lb. | .31 | — |
| 1217 | Orange RD, double powder. | lb. | 4.60 | — |
| p-4 | Brown PG | lb. | 3.00 | — |
| p-14 | Brown EB | lb. | 2.16 | — |
| p-24 | Gray L | lb. | 2.08 | — |
| p-80 | Diazo brilliant scarlet ROAD | lb. | 3.62 | — |
| p-202 | Diazo black VJ, conc | lb. | 2.48 | — |
| p-244 | Brilliant scarlet BN | lb. | 1.70 | — |
| p-313 | Naphthol SWF | lb. | 1.60 | — |

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.

| | | | | |
|---|---|---|---|---|
| 24 | Oil orange Z-7078 | lb. | 1.06 | — |
| 73 | Oil scarlet BL | lb. | 1.70 | — |
| 1073 | Oil violet ZIRS | lb. | 6.81 | — |
| 1078 | Alizarine cyanine green base Z | lb. | 6.13 | — |
| 1080 | Oil violet special Z | lb. | 6.81 | — |
| | Oil black ZBC | lb. | 4.46 | — |
| | Oil black ZBD | lb. | 3.03 | — |
| | Oil black ZHH | lb. | 4.61 | — |

Dyes, coaltar, oil-soluble, 100 lb. drums, dlvd. No.

| | | | | |
|---|---|---|---|---|
| | Oil black ZMM | lb. | 6.52 | — |
| | Oil blue ZN | lb. | 8.02 | — |
| | Oil blue ZV | lb. | 4.95 | — |
| | Oil orange ZMG | lb. | 1.32 | — |
| | Oil red N-1700 | lb. | 1.76 | — |
| | Oil yellow ZG, conc | lb. | 6.33 | — |

## Price is no tall tale to this Texan

*(He helps stabilize glycerine price through increased production)*

You might say our production-control men are traffic policemen for synthetic glycerine at our new Velasco, Texas, plant. They keep a sharp eye on temperatures and pressures, and direct product flow.

When they say "go" with the twist of a valve—thousands of gallons of glycerine move one processing stage closer to customers. And how it is welcomed!

For, before this new plant existed, glycerine users were up against fluctuating prices. It was nigh onto impossible to anticipate future costs. Following the market was like riding a bronco sidesaddle. But now that's ended. The added production of our Texas plant has put glycerine on a stable price basis. What's more, it has stabilized supply.

For all the facts, write for our new booklet on synthetic glycerine. You'll find it a big help in charting the future ... today! THE DOW CHEMICAL COMPANY, Midland, Mich., Dept. GD 800C-1

YOU CAN DEPEND ON DOW

Dyes, coaltar, spirit soluble, 100 lb.
dms., dlvd. No.
p-317 Spirit yellow 2R, conc....lb. 4.62 - —
p-320 Spirit orange ZR, conc....lb. 5.87 - —
Spirit black RB.....lb. 2.95 - —
Spirit brown ZG.....lb. 5.30 - —
Spirit red B, conc.....lb. 6.41 - —

## E

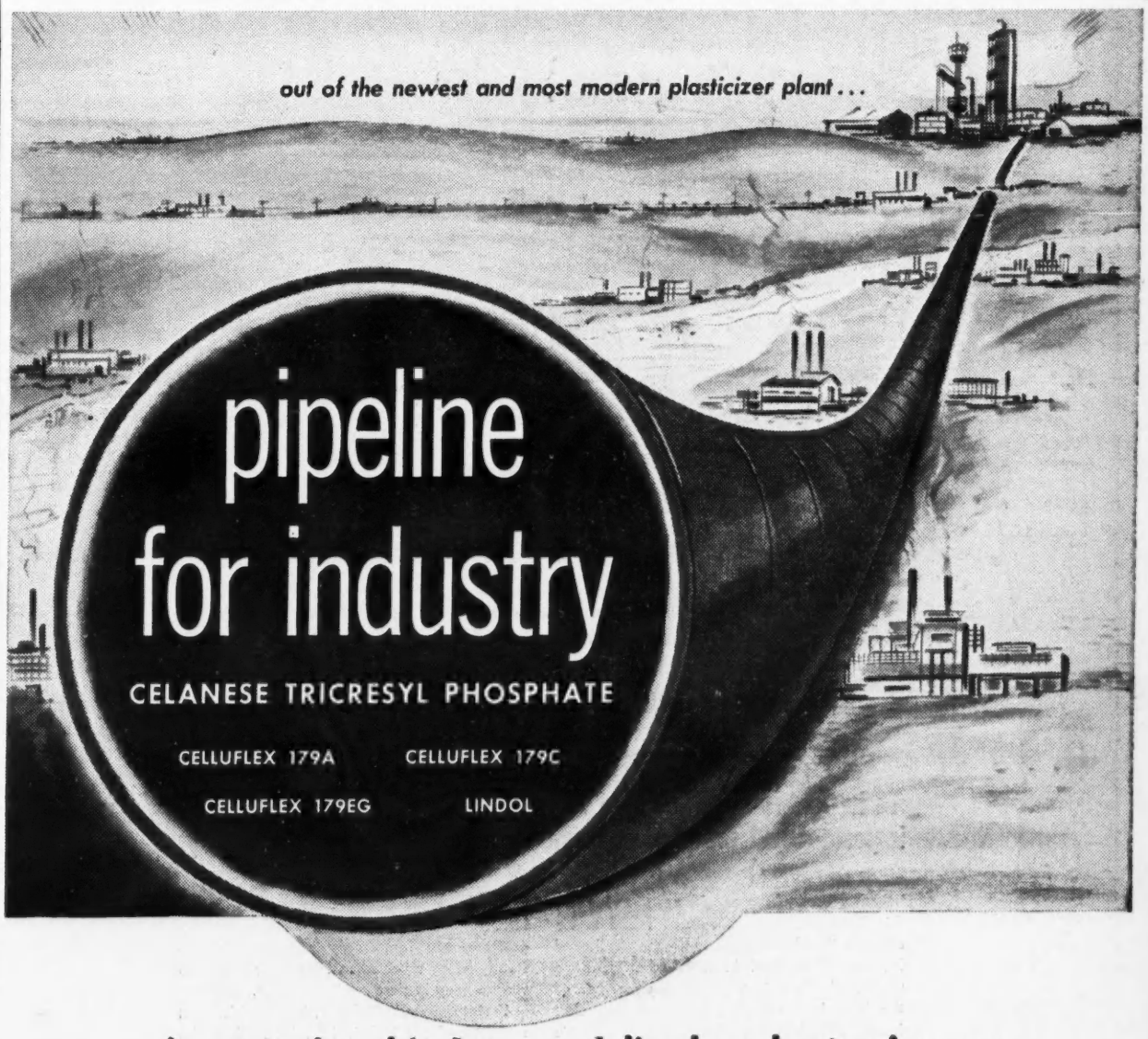
Echinacea root, bls.....lb. 1.10 - —
Egg albumin (see Albumin).
Egg yolk, dried, dom., bbls.....lb. 1.01 - 1.03
Tanners, bbls.....lb. .06 - .06½
Elm bark, grinding, bls.....lb. .30 - .32
Powd., bbls., bxs.....lb. .45 - —
Select, bundles.....lb. .75 - —
Emetine hydrochloride, USP, bots.
oz.48.25 -49.00
Endrin, tech., dms., dlvd. 100% basis..lb. 3.75 - —
Eosine red toner, bbls., works..lb. 1.75 - —
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots..oz. .98 - 1.00
hydrous, bots., 100-oz. lots..oz. .92 - —
Ephedrine hydrochloride, tins, 100-oz. lots..oz. .65 - .75
Ephedrine sulfate, cryst., tins, 100-oz. lots..oz. .65 - .72
Powd., tins, 100-oz. lots.....oz. .66 - .73
Epichlorohydrin, dms., c.l., dlvd..lb. .35½- —
dms., l.c.l., dlvd.....lb. .36½- —
tanks, dlvd.....lb. .33 - —
1-Epinephrine, base, syn., USP, bots., 100 gram lots..gram. .60 - —
Epsom salt (see Magnesium sulfate).
Erigeron oil, cns.....lb. 5.50 - 7.50
Ergot, NF, dms., tin-lined.....lb. 2.00 - —
Eserine suufate, bots.....oz.87.75 - —
Eserine sulfate, bots.....oz.87.75 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.....lb. .14½- .16
Ester gum, wood-rosin type, dms., c.l., same basis..lb. .15 - .16
Ether (see specific product).
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld..lb. .14½- —
dms., l.c.l., frt. alld.....lb. .15½- —
tanks, frt. alld.....lb. .12 - —
95-98%, dms., c.l., frt. alld..lb. .14¾- —
dms., l.c.l., frt. alld.....lb. .15¾- —
tanks, frt. alld.....lb. .12¼- —
99%, dms., c.l., frt. alld..lb. .15 - —
dms., l.c.l., frt. alld.....lb. .16 - —
tanks, frt. alld.....lb. .12½- —
Syn., 85-88%, dms., c.l., dlvd..lb. .14½- —
dms., l.c.l., dlvd.....lb. .15½- —
tanks, dlvd.....lb. .12 - —
95-98%, dms., c.l., dlvd.....lb. .14¾- —
dms., l.c.l., dlvd.....lb. .15¾- —
tanks, dlvd.....lb. .12¼- —
Ethyl acetate, syn., 99%, dms., c.l., dlvd..lb. .15 - —
dms., l.c.l., dlvd.....lb. .16 - —
tanks, dlvd.....lb. .12½- —
Ethyl acetoacetate, dms., c.l., dlvd. lb. .58½- —
dms., l.c.l., dlvd.....lb. .59½- —
tanks, dlvd.....lb. .56 - —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 - —
dms., l.t.l., dlvd.....lb. .37 - —
tanks, dlvd.....lb. .34 - —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies. gal.20.58 - —
dms., l.c.l., same basis....gal.20.63 -20.69
tanks, same basis.....gal.20.42 - —
tax-free, dms., c.l., dlvd. E. of Rockies..gal. .63 - —
dms., l.c.l., same basis..gal. .68 - .74
tanks, same basis.....gal. .47 - —
Ethyl alcohol, absolute, 200 pf. tax paid, dms., dlvd. E. of Rockies. gal.21.70 - —
dms., l.c.l., same basis....gal.21.75 -21.81
tanks, same basis.....gal.21.54 - —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., same basis.....lb. .21 - —
tanks, same basis.....lb. .17½- —
Ethyl benzoate, bots.....lb. .74 - .90
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E..lb. .46 - —
dms., l.c.l., frt. alld E.....lb. .48 - —
tanks, frt. alld. E.....lb. .43 - —
Ethyl butyl ketone, dms., c.l., t.l., works..lb. .36 - —
dms., l.c.l., l.t.l., works.....lb. .36¾- —
tanks, works.....lb. .34 - —
Ethyl butyrate, works.....lb. .83 - .90
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works..lb. .70 - —
bgs., smaller lots, works.....lb. .72 - .80
Vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works. lb. .65 - .70
bgs., smaller lots, works....lb. .67 - .81
Ethyl chloride, tech., cyls., works. lb. .20 - .22
dms., works.....lb. .18 - .20
tanks, works.....lb. 10 - —
Ethyl cinnamate, cns.....lb. 3.35 - 3.45
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E..lb. .43½- —
Ethyl ether, absolute, ACS, dms..lb. .27 - —
Anesthesia, USP, hospitals, 1-lb. cns..lb. 1.01 - —
½-lb. cns.....lb. 1.09 - —
¼-lb. cns.....lb. 1.21 - —
Ethyl ether, indust., dms., c.l., dlvd. lb. .12½- —
dms., l.c.l., dlvd. E.....lb. .13½- —
tanks, dlvd. E.....lb. .10 - —
Ethyl gallate, dms., 100 to 2,000-lb. lots..lb. 3.90 - 4.40
Ethyl iodide, cbys., works.....lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald..lb. .52 - —
dms., l.t.l., frt. equald.....lb. .52½- —
tanks, frt. equald.....lb. .50 - —
Ethyl morphine hydrochloride, USP, bots..oz.11.85 - —
Ethyl nitrite (see Nitrous ether).
Ethyl oenanthate, dms.....lb. 1.00 - 1.50
Ethyl oleate, dms., l.c.l., works..lb. No prices
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available $SiO_2$, dms., c.l., dlvd..lb. .44½- —
dms., l.c.l., dlvd.....lb. .45½- —
tanks, dlvd.....lb. .42 - —
dms., l.c.l. dlvd. E.....lb. .44½- —
tanks, dlvd. E.....lb. .41½- —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —
N-Ethyl-o-toluidide, bbls.....lb. .88 - —
Ethylamine (see Mono, Di- or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld.....lb. .58 - —
tanks, frt. alld.....lb. .55 - —
Ethylbenzene, 99%, dms., c.l. or t.l., frt. equald..lb. .17 - —
dms., l.c.l., same basis.....lb. .18 - —
tanks, same basis.....lb. .15 - —

2-Ethylbutyl alcohol, dms., c.l., works..lb. .30 - —
dms., l.c.l., works.....lb. .30¾- —
2-Ethylhexyl alcohol, dms., c.l., dlvd. works..lb. .30 - —
dms., l.c.l., works.....lb. .30¾- —
tanks, works.....lb. .28 - —
2-Ethylhexoic acid, dms., c.l., dlvd. dms., l.c.l., dlvd.....lb. .38 - —
tanks, dlvd.....lb. .34½- —
E..lb. .24¼- —
dms., l.c.l., same basis.....lb. .25¼- —
tanks, same basis.....lb. .21¾- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis.....lb. .12½- —
tanks, same basis.....lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E..lb. .16 - —
dms., l.c.l., same basis.....lb. .17 - —
tanks, same basis.....lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E..lb. .22 - —
dms., l.c.l., dlvd. E.....lb. .23 - —
tanks, dlvd. E.....lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E..lb. .21 - —
dms., l.c.l., dlvd. E.....lb. .22 - —
tanks, dlvd. E.....lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E..lb. .19½- —
dms., l.c.l., dlvd. E.....lb. .20½- —
tanks, dlvd. E.....lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E..lb. .21 - —
dms., l.c.l., dlvd. E.....lb. .22 - —
tanks, dlvd. E.....lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E..lb. .29 - —
dms., l.c.l., dlvd. E.....lb. .29¾- —
tanks, dlvd. E.....lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms...lb. .33 - .35
Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E.....lb. .24½- —
tanks, dlvd. E.....lb. .15½- —
Ethylene trichloride (see Trichloroethylene).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis..lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis..lb. .40 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over..lb. 6.40 - —
100-lb. fib. dms., smaller lots..lb. 6.65 - 6.95
Eucalyptol, USP, cns., dms.....lb. 1.25 - 1.40
Eucalyptus oil, NF, rectified, 70-80% dms..lb. .62 - —
NF, rectified, 80-90%, dms.....lb. .72 - —
Eugenol, USP, bots.....lb. 2.25 - 2.60
Euphorbia herb, bls.....lb. .15 - .17

## F

F acid, crude, paste, bbls., works. lb. 2.10 - —
Feldspar, 140-200 mesh, bulk, c.l., works..ton.19.50 - —
Feldspar in bags $3 per ton higher.

Fennel oil, sweet, USP, cns.....lb. 2.85 - —
Fennel seed, Argentine, bgs.....lb. .13½- —
Czech, medium, bgs.....lb. .09 - —
Indian, light, bgs.....lb. .15½- —
Rumanian, bgs.....lb. .09 - —
Fenugreek seed, Indian, bgs.....lb. .08½- .09
Moroccan, bgs.....lb. .08½- .09
Ferric acetate, liq., 28°, bbls., c.l., works..lb. .09 - —
bbls., l.c.l., works.....lb. .09¾- —
Soln., USP IX, cbys.....lb. .16 - —
USP IX, djns.....lb. .17 - —
Ferric chloride, anhyd., tech., dms., c.l., works..100 lbs. 7.00 - —
dms., l.c.l., works....100 lbs. 7.85 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works.....100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
42° Be., sewage grade, tanks, frt. equald, 100% basis. 100 lbs. 3.75 - —
USP, cryst., dms., works.....lb. .07½- .09
Ferric citrate, gran., dms.....lb. .86 - —
Ferric hypophosphite, NF, dms..lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld..lb. .25¾- —
Ferric oxalate, gran., dms.....lb. .85 - .87
Ferric oxides (see Iron oxides).
Ferric phosphate, NF, soluble, gran., pearls, cs..lb. .64 - .65
Ferric pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000-lb. lots..lb. .40½- —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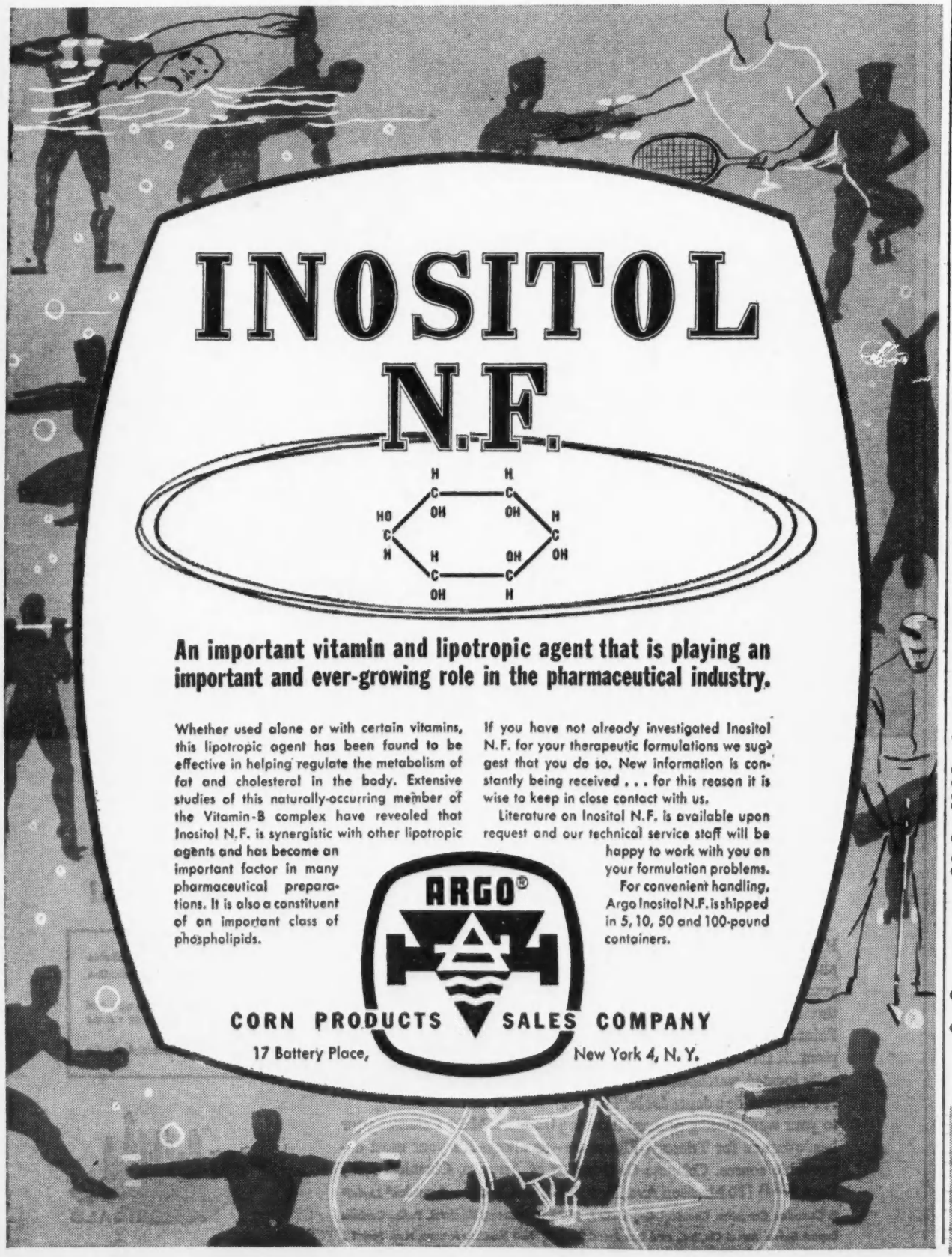
Celanese CHEMICALS

Ferric resinate, 6¾% Fe., dms., frt. alld..lb. .29½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 • —
dms., l.c.l., frt. alld.....lb. .40 • .44
Ferric sulfate, partly hydrated, bgs., c.l., works..ton.35.25 • —
bgs., l.c.l., works.....ton.36.25 -42.25
bulk, c.l., works.....ton.33.25 • —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms..lb. .65 • .68
Green, pearls, USP XII, gran., dms..lb. .66 • .69
Ferric-ammonium oxalate, fine gran., dms..lb. .25½- .28½
Ferric-potassium oxalate, fine gran., dms..lb. .30½- .33½
Ferric sodium oxalate, fine gran., dms..lb. .25½- .28½
Ferrous gluconate, NF, dms.....lb. .94 • —
Ferrous sulfate, gran., bgs., c.l., works..ton.34.50 • —
dms., l.c.l., dlvd. Metropolitan area..100 lbs. 3.35 • 4.25
bbls., c.l., works.....ton.40.00 • —
bulk, c.l., works.....ton.27.00 • —
USP, cryst., bbls., dms.....lb. .09½- .10
Fir, balsam, Canada, cns.....gal.32.00 -35.00
Oregon, bbls.....gal. 3.75 • 4.00
Fir oil, Canada, cns.....lb. 4.75 • —

Fish oil, refd., alkali, dms.....lb. .1450- .1500
Kettle-bodied, dms.....lb. .1680- .1730
Light-pressed, dms.....lb. .1300- .1350
tanks .....lb. .1150- —
Fishliver oil, crude, for concentrating, 100,000 A units per gram, dms.....1,000,000 units. .14 • —
200,000 A units per gram., dms., 1,000,000 units. .15½- —
500,000 A units per gram., dms., 1,000,000 units. .16 • —
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area..ton.140.00 • —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., same basis..ton.137.00 • —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo-lots or more..gram. 1.40 • —
10% feed grade, fib. dms., 15 kilos or more..kilo.100.00 • —
Formaldehyde, 37%, (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd..lb. .0715- —
tanks, dlvd.....lb. .0450- —
37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd..lb. .0740- —
tanks, dlvd.....lb. .0475- —
Methanol-free (uninhibited), tanks, dlvd..lb. .0420- —

Formic acid, 85%, cbys., c.l., works, lb. .1570- —
cbys., l.c.l., works.....lb. .1620- .1720
90%, cbys., c.l., works.....lb. .1625- —
cbys., l.c.l., works.....lb. .1675- .1775
Fringetree bark, bls.....lb. .60 • .61
Fuller's earth, bgs., c.l., Ill. mines, ton.19.00 • —
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines..ton.17.50 • —
calcined, bgs., c.l., same basis, ton.20.00 -21.75
Oil-bleaching grade, 100-mesh, bgs., c.l., same basis..ton.16.30 -17.00
200-mesh, bgs., c.l., same basis, ton.17.50 -18.00
Spent, bgs., c.l. ship. point..ton. 4.50 • 5.00
Fumaric acid, tech., bgs., dms., c.l., frt. alld. E..lb. .27 • —
bgs., l.c.l., same basis.....lb. .28 • —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l., works.....lb. .13 • —
dms., l.c.l., works .....lb. .14 • —
tanks, dlvd. E.....lb. .12 • —
tanks, dlvd. W.....lb. .13 • —
Furfuryl alcohol, cns., works.....lb. .29 • —
dms., c.l., Memphis, Tenn.....lb. .20 • —
dms., c.l., Newark, N. J.....lb. .21½- —
dms., l.c.l., Memphis, Tenn.....lb. .21 • —
dms., l.c.l., Newark, N. J.....lb. .22½- —
tanks, Memphis, Tenn. .....lb. .184 • —
Fusel oil, refd., dms., c.l., dlvd..lb. .18 • —
dms., l.c.l., dlvd. .....lb. .19 • —
tanks, dlvd. .....lb. .15½- —
Fustic extract, cryst., No. 1, bbls., l.c.l...lb. .47½- —
No. 2 bbls., l.c.l. .....lb. .45½- —
No. 3, bbls., l.c.l. .....lb. .43½- —
Liq., No. 1, bbls., l.c.l. .....lb. .22½- —
No. 2, bbls., l.c.l. .....lb. .21½- —
No. 3, bbls., l.c.l. .....lb. .19 • —
Solid, No. 1, bxs., l.c.l.....lb. .45 • —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## G

G salt, bbls., frt. alld., 100% basis lb. .73 • —
Gallic acid, NF VII, bbls., 1,000-lb. lots..lb. 2.00 • —
bbls., smaller lots .....lb. 2.02 • 2.22
Tech., bbls., 1,000-lb. lots.....lb. 1.78 • —
bbls., smaller lots .....lb. 1.80 • 2.00
Gamma acid, dry grd., bbls., frt. alld..lb. 1.50 • —
Paste, bbls., frt. alld.....lb. 1.45 • —
Gammapicoline (see g-picoline).
Garlic oil, pure, bots.....oz. 4.25 • 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l..lb. .53 • —
150 Bloom test, bbls., c.l..lb. .65 • —
200 Bloom test, bbls., c.l...lb. .72 • —
225 Bloom test, bbls., c.l...lb. .75 • —
275 Bloom test, bbls., c.l...lb. .82 • —
Gelsemium root, bls. .....lb. .26 • —
Gentian root, bls. .....lb. .23 • —
Grd., bbls., bxs. .....lb. .27 • —
Powd., bbls, bxs. .....lb. .27 • —
Geraniol, extra, cns., dms.....lb. 3.40 • 3.70
Standard, cns., dms. .....lb. 3.30 • 3.60
Geranium oil, Algerian, cns.....lb.14.75 • —
Bourbon, cns. .....lb.16.00 • —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. .....lb. 3.10 • —
Ginger oil, dist., bots. .....lb.13.50 • —
Ginger oleoresin, NF, from African root, bots..lb. 4.00 • 7.75
NF, from Jamaican root, bots..lb. 6.00 -10.25
Ginger root, African, bls.....lb. .33 • —
Cochin, bgs. .....lb. .26½- —
Jamaican, No. 2, bgs.....lb. .76 • —
No. 3 bgs. .....lb. .75 • —
Nigerian, split, bgs. .....lb. .28 • —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, bots., works..lb. .25 • —
non-ret, dms., c.l., works..lb. .15½- —
dms., 1-dm. lots, works...lb. .16 • —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .15 • —
104 jellygrams, bgs., c.l., same basis..lb. .17 • —
131 jellygrams, bgs., c.l., same basis..lb. .18 • —
191 jellygrams, bgs., c.l., same basis..lb. 21 • —
222 jellygrams, bgs., c.l., same basis..lb. .22 • —
Bone, green, dry bone, 40 jellygrams, bgs., c.l., same basis..lb. .13½- —
65 jellygrams, bgs., c.l., same basis..lb. .13¾- —
86 jellygrams, bgs., c.l., same basis..lb. .14 • —
115 jellygrams, bgs., c.l., same basis..lb. .14½- —
135 jellygrams, bgs., c.l., same basis..lb. .15 • —
164 jellygrams, bgs., c.l., same basis..lb. .16 • —
180 jellygrams, bgs., c.l., same basis..lb. .17 • —
200 jellygrams, bgs., c.l., same basis..lb. .18½- —
Bone glue, l.c.l., prices 1c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd..lb. .15 • —
93-121 bgs., c.l., dlvd.....lb. .16 • —
122-149, bgs., c.l., dlvd.....lb. .18½- —
150-177, bgs., c.l., dlvd.....lb. .21 • —
178-206, bgs., c.l., dlvd.....lb. .23½- —
207-236, bgs., c.l., dlvd.....lb. .26 • —
237-266, bgs., c.l., dlvd.....lb. .28 • —
267-298, bgs., c.l., dlvd.....lb. .30 • —
299-330, bgs., c.l., dlvd.....lb. .32 • —
331-362, bgs., c.l., dlvd.....lb. .34 • —
363-394, bgs., c.l., dlvd.....lb. .36 • —
395-427 bgs., c.l., dlvd.....lb. .38 • —
428-460, bgs., c.l., dlvd.....lb. .40 • —
461-494, bgs., c.l., dlvd.....lb. .42 • —
495-529, bgs., c.l., dlvd.....lb. .43 • —
Hide glue, l.c.l. prices 1c. higher.
1-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld..lb. 2.00 • —
fib. dms., 25-lb. lots, frt. alld. lb. 2.05 • —
1-Glutamine, bots. .....gram. .65 • —
Glycerine, crude, nat., saponification, 88%, to refineries, tanks.. .16½- .18¼
Crude, nat., soaplye, tanks...lb. .15 • .16¾
Glycerine, refd., USP, CP, 99%, dms., c.l., dlvd..lb. .29⅜- —
dms., l.c.l., dlvd .....lb. .29⅞- —
tanks, dlvd. .....lb. .27⅛- —
USP, CP, 96%, dms., c.l., dlvd. lb. .28½- —
dms., l.c.l., dlvd. .....lb. .29 • —
tanks, dlvd. .....lb. .27 • —
Refd., high gravity, dms., c.l., dlvd..lb. .29¼- —
dms., l.c.l., dlvd.....lb. .29¾- —
tanks, dlvd.....lb. .27¾- —
high gravity, yellow, dist., dms., c.l...lb. .28½- —
dms., l.c.l., dlvd.....lb. .29 • —
Glycerine, syn., dms., c.l., dlvd..lb. .29½- —
dms., l.c.l., dlvd.....lb. .30 • —
tanks, dlvd.....lb. .28 • —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works..lb. .20½- —
dms., l.c.l., works.....lb. .21¼- —
tanks, works.....lb. .18 • —
Golden seal root, NF, tested, bls. lb. 3.85 • —
Grapefruit oil, dms.....lb. 1.50 • —
Graphite, amorph., powd., bgs., fib. dms., ex whse..lb. .06 • .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse..lb. .19 • .21½
90-92%, powd., bgs., fib. dms., ex whse..lb. .21 • .24½
95-97%, powd., bgs., fib. dms., ex whse..lb. .29 • .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse..lb. .29 • .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse..lb. .29 • .31
Grease, white, choice, all hog, tanks, dlvd..lb. .09 Nom.
Yellow, tanks, dlvd.....lb. .06¾- .07
Grease oil, No. 1, dms., c.l.....lb. .15¾- —
dms., l.c.l.....lb. .16¾- .18¾
Extra winter, strained, dms., c.l. lb. .18¼- —
dms., l.c.l.....lb. .19¼- .21¼
Prime, burning, dms., c.l.....lb. .19¾- —
dms., l.c.l.....lb. .20¾- .22¾

### *Green Pigments*

Green pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindella robusta herb, bls.....lb. .45 - —
Guaiacol, NF, cryst., dms., tins..lb. 2.10 - 2.15
NF, liq., cbys., dms.....lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms.lb. 3.40 - 3.45
Guar gum, food grade, bgs....lb. .50 - —
Tech. grade, bgs.....lb. .40 - —
Guaiacwood oil, cns.....lb. 1.60 - —

### Gums

Gum quotations, formerly grouped under one heading, are now listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York..ton.20.30 - —
Gypsum, terra alba, dom., 100-lb. paper bgs., trucks, same basis ton.20.00 - —
100-lb. paper bgs., trucks, works, New York...ton.17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., ex dock, New York..ton.55.00 - —
100-lb. paper bgs., ex whse. ton.60.00 -62.00

## H

H acid, dry, bbls., c.l., frt. alld., 100% basis..lb. 1.00 - —
bbls., l.c.l., same basis.....lb. 1.02 - —
Hansa yellow, 10 G, bbls., same basis as yellow, chrome.lb. 2.35 - —
Hansa G pigment, bbls.....lb. 2.20 - —
Hawthorn berries, bgs.....lb. .21 - —
Heliotropin, 100-lb. lots, dms....lb. 3.00 - 3.25
Hellebore root, dom., green, bls..lb. .70 - .75
Helonias root, bls.....lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l..lb. .47 - —
No. 2, bbls., l.c.l.....lb. .43 - —
No. 3, bbls., l.c.l.....lb. .41 - —
No. 4, bbls., l.c.l.....lb. .39 - —
No. 5, bbls., l.c.l.....lb. .37 - —
Paste, No. 1, bbls., l.c.l.....lb. .20½- —
Hemlock oil, cns.....lb. 2.10 - 2.50
Henbane leaves, bls.....lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J. gal .20 - —
tanks, Baytown, Tex.....gal. .16¼- —
tanks, Borger, Tex.....gal. .16¼- —
Hesperidin, purif., 25 lb. lots, f.o.b., works..lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works..lb.22.50 - —
bots., 5-lb. lots, works.....lb.23.00 - —
bots., 1-lb. lots, works.....lb.23.50 - —
Hexachlorophene, dms.....lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York..lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis..lb. .243 - —
Hexamethylenetetramine, tech., bgs., smaller lots, same basis. lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia..lb. .42½- —
bgs., smaller lots, same basis..lb. .43½- .48½
Hexane, indust., tanks, Bayonne, N. J..gal. .20 - —
tanks, Baytown, Tex.....gal. .17 - —
tanks, Borger, Tex.....gal. .17 - —
1-Hexanol, dms., c.l., works.....lb. .35 - —
dms., l.c.l., works.....lb. .35¾- —
tanks, works.....lb. .33 - —
Hexyl cinnamic aldehyde, dms..lb. 4.00 - 7.50
Hexyl salicylate, dms.....lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd..lb. .17 - —
dms., l.c.l., dlvd.....lb. .18 - —
tanks, dlvd.....lb. .14½- —
n-Hexyl methacrylate, dms., c.l., works..lb. .75½- —
dms., l.c.l., works.....lb. .76 - —
Hexyresorcinol, USP, dms., 50-lb. lots or more, dlvd..lb.14.00 - —
dms., smaller lots, dlvd.....lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 5.50 - —
Homatropine methylbromide, USP, bots. oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago..unit-ton. 6.25 - —
Horehound herb, bls.....lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine, free base, ret., dms., works lb. No. Stocks.
Hydrazine hydrate, 85%, ret. dms., works..lb. 1.35 - 1.55
100%, ret. dms., works.....lb. 1.60 - 1.90
Hydriodic acid, 1.50 s.g., cbys....lb. 2.94 - —
1.70 s.g., cbys.....lb. 3.23 - —
Hydroabietyl alcohol, tech., solid, zone 1, dms., c.l., dlvd....lb. .29¼- —
dms., l.c.l., dlvd.....lb. .29¾- .30¼
tanks, dlvd.....lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., dlvd E lb. .37 - .43
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton.28.00 - —
20°, cbys., c.l., works.....100 lbs. 2.75 - —
cbys., l.c.l., dlvd. metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton.30.00 - —
22°, cbys., c.l., works.....100 lbs. 3.25 - —
cbys., l.c.l., dlvd. metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton.35.00 - —
CP, USP, consumers, cbys., extra, c.l., works..lb. .15¾- —
cbys., l.c.l., same basis.....lb. .17¼- .17¾
5-pint bots., extra, cs., c.l., same basis lb. .20¾- —
5-pint bots., extra, cs., l.c.l., same basis..lb. .22¼- .23¼
Hydrocortisone acetate, bulk, bots., 100 grams or more..gram. 4.50 - —
Hydrocortisone alcohol, bulk, bots., 100 grams or more..gram. 4.50 - —
Hydrocyanic acid, cyls., c.l., dlvd. lb. .70 - —
cyls., l.c.l., same basis.....lb. .75 - .90
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).

Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd., 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.15.50 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis..lb. .06 - —
Hydrofuramide, dms., fib. ctns., works..lb. .30 - .40
Hydrogen chloride anhyd., 50-lb. cyls., l.c., works..lb. .45 - —
50-lb. cyls., l.c.l., works.....lb. .55 - .60
Hydrogen fluoride, anhyd., cyls., dlvd. E..lb. .30½- .32½
cyls., dlvd. W.....lb. .39 - —
tanks, works.....lb. .21 - —
Hydrogen peroxide, USP, bbls., dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd.....lb. .202 - —
dms., l.c.l., dlvd.....lb. .211 - —
tanks, dlvd.....lb. .1800- —
Hydroquinone photo grade, dms..lb. 1.03 - 1.06
Tech., dms., c.l., dlvd.....lb. .82½- —
dms., l.c.l., dlvd.....lb. .84½- —
Hydroxyacetic acid, tech., 70%, non-ret. bbls., Phila., 100% basis..lb. .136 - —
tanks, Belle, W. Va., 100% basis..lb. .093 - —
Hydroxycitronellal, cns.....lb. 6.00 - 7.45
Hyoscine salts (see Scopolamine).
Hiosocyamine hydrobromide, bots.oz. 6.00 - 7.00
Hyoscyamine sulfate, bots.....oz. 6.75 - 7.25
Hypernic extract, cryst., No. 1, bbls., l.c.l...lb. .52 - —
Liq., No. 1, bbls., l.c.l.....lb. .35 - —
No. 2, bbls., l.c.l.....lb. .27 - —
Hydrophosphorous acid, purif., 50%, cbys..lb. 1.30 - 1.32
USP, cbys.....lb. .88 - —

## I

Ichthammol, NF, dms., jars.....lb. .75 - .95
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP, bots.....lb.16.50 -21.00
Inositol, bots., dlvd.....lb. 5.00 - —
dms., dlvd.....lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs.....lb. 1.10 - —
Resub., USP, dms., jars.....lb. 2.30 - 2.32
Iodochlorohydroxyquinolin, USP, dms..lb. 5.90 - —
Iodoform, NF, dms., kgs.....lb. 4.90 - 5.00
a-Ionone, cns.....lb. 5.25 - 5.40
b-Ionone, cns.....lb. 5.40 - 5.70
Ipecac root, bgs., whole.....lb. 7.50 - —
Powd., bbls., bxs.....lb. 7.85 - —
Irish moss, bleached, prime, bls..lb. .28 - .34

Iron blue, reg., bbls., c.l., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. .52 - —
bbls., l.c.l., ton lots, same basis..lb. .53 - —
bbls., smaller lots, same basis. lb. .54 - —
Iron blue, alkali-resisting, bbls., c.l., same basis lb. .57 - —
bbls., l.c.l., ton lots, same basis. lb. .58 - —
Iron blue, alkali-resisting, bbls., smaller lots same basis.lb. .59 - —

Iron blue dlvd. prices 1½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Iron compounds (see Ferric or Ferrous).
Iron oxide black, pure, bgs., c.l., works..lb. .13¼- —
bgs., l.c.l., works.....lb. .13½- —
Iron oxide brown, pure, bgs., c.l., works..lb. .14¼- —
bgs., l.c.l., works.....lb. .14½- —
Iron oxide hydrated yellow, pure, bgs., c.l., works..lb. .11½- —
Iron oxide metallic brown, bgs., works..lb. .04 - —


# This Label Is Your ASSURANCE of FIRST GRADE, HIGHEST QUALITY LEMON OIL

## because...

- The M.C.P. label is that of one of the nation's oldest specialists in quality citrus products — pectins, juices, concentrates, etc.
- It's the *producer's* label — which means that M.C.P. LEMON OIL is pure and unadulterated...cold-pressed in California and *packed by the producer* . . . to assure the user receiving it pure and unadulterated.
- It identifies M.C.P. LEMON OIL as one that meets all the long-accepted standards for highest quality and finest flavor.
- There is but one M.C.P. LEMON OIL label, and this is what it means:—*An exclusively first grade lemon oil, for M.C.P. packs but this one top grade!*

Produced and Packed by

**MUTUAL CITRUS PRODUCTS COMPANY**
**Since 1928 Growers and Processors of Citrus Products**

*Distributed by*

**MUTUAL CITRUS PRODUCTS CO.**
**424 South Atchison Street, Anaheim, Calif.**

**W. J. BUSH & CO., INC.**
**137 Boston Post Road, Cos Cob, Conn.**

Iron oxide metallic red, bbls., c.l., works..lb. .02½- —
bbls., l.c.l., works..lb. .02¾- —
Iron oxide Persian Gulf red, bgs., c.l., works..lb. .07¾- —
Iron oxide red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y..lb. .12¾- —
Iron oxide red, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley O., Easton, Pa. bgs., c.l., works..lb. .0675- —
bgs., l.c.l., works..lb. .08 • —
Iron oxide Spanish red, bbls., c.l, ex dock..lb. .05¾- —
bbls., l.c.l., ex dock..lb. .06 • —
bbls., l.c.l., ex whse, New York..lb. .06½- —
bgs., l.c.l., works..lb. .11¾- —
Iron oxide yellow, nat., French type, bgs., c.l., works..lb. .06 • —
Peruvian type, bgs., l.c.l..lb. .0205- .0345
Isoamyl alcohol, dms., c.l., works, frt. alld. E..lb. .28 • —
dms., l.c.l., same basis..lb. .29 • —
tanks, same basis..lb. .25 • —
Isoborneol, cns..lb. 1.25 • 1.70
Isobornyl acetate, cns..lb. .46 • .70
Isobornyl formate, dms..lb. .80 • —
Isobornyl propionate, dms..lb. 1.15 • 1.45
Isobutyl acetate, perfume grade, cns..lb. .75 • 1.00
Solvent grade, dms., c.l., dlvd. E. of Rockies..lb. .14¾- —
dms., l.c.l., same basis..lb. .15¾- —
tanks, same basis..lb. .12¼- —

Isobutyl alcohol, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd..lb. .16½- —
tanks, dlvd..lb. .13 • —
Isobutyraldehyde, CP, dms., c.l., dlvd..lb. .27½- —
dms., l.c.l., dlvd..lb. .28½- —
Tech., dms., c.l., dlvd..lb. .21½- —
dms., l.c.l., dlvd..lb. .22½- —
tanks, dlvd..lb. .19½- —
Isoeugenol, cns..lb. 3.60 • 4.40
Isoniazid, powd., bulk, 25-kilo lots or more..kilo. 23.00 -25.50
bulk, smaller lots..kilo. 24.00 -26.00
Isonicotinic acid, 100-lb. fib. dms., works..lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms. c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd E..lb. .24½- —
tanks, dlvd E..lb. .21 • —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy..gal. .15½- —
Isophorone, dms., c.l., works..lb. .24½- —
dms., l.c.l., works..lb. .25¼- —
tanks, works..lb. .22½- —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate,, dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., same basis..lb. .14½- —
tanks, same basis..lb. .11 • —

Isopropyl alcohol, refd., 91%, dms., c.l., dlvd..gal. .83 • —
dms., l.c.l., dlvd..gal. .60 • —
tanks, dlvd..gal. .37 • —
Refd., 95%, c.l., dms., dlvd..gal. .55 • —
dms., l.c.l., dlvd..gal. .62 • —
tanks, dlvd..gal. .39 • —
Refd., 99%, dms., c.l., dlvd..gal. .57 • —
dms., l.c.l., dlvd..gal. .64 • —
tanks, dlvd..gal. .41 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., dlvd..lb. .07 • —
dms., l.c.l., dlvd..lb. .08 • —
tanks, dlvd..lb. .05 • —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), 70% in xylol, dms., c.l., t.l., works..lb. .70 • —
dms., l.c.l., works..lb. .714 • .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works..lb. .75 • —
450-lb. fib. dms., l.c.l., works..lb. .80 • .90
Isoquinoline, dms., works..lb. .65 • 1.25
Itaconic acid, purif., fib. dms., c.l., works..lb. .54 • —
fib. dms., l.c.l., works..lb. .55 • —
Tech., fib. dms., c.l., works..lb. .44 • —
fib. dms., l.c.l., works..lb. .45 • —

## J

J acid, paste, bbls., works, 100% basis..lb. 2.45 • —
Powd., bbls., same basis..lb. 2.50 • 2.85
Jalap root, NF, bls..lb. No stocks.
powd., bbls., bxs..lb. No stocks.
Japan wax, cs..lb. .43 • .44
Juniper berries, bgs..lb. .18 • .20
Juniper berry oil, bots..lb. 2.75 • 4.00
Twice rectified, bots..lb. 3.60 • 7.00
Juniper tar, NF, dms..lb. .42 • .60
Juniper tar oil, NF (see Juniper tar).
Juniper wood oil, tech., cns..lb. .38 • .55

## K

Kaolin see also Clay, China).
Kaolin, NF, powd., fib. dms..lb. .10 • .12
colloidal, fib. dms..lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bbls. lb. .50 • —
No. 2, powd., bbls..lb. .35 • .38
No. 3, powd., bbls..lb. .32 • .35
Koch acid, bbls., frt. alld., 100% basis..lb. 1.00 • —
Kola nuts, bgs..lb. .15 • —

## L

L acid, bbls., works..lb. 1.25 • —
Lacquer diluent, petroleum, 150°-240° F. b.r., tanks, west coast, ex tax, Los Angeles gal. .174 • —
tanks, east coast, N. J., N. Y.
Benzene type, tanks, group 3 gal. .1525- —
Toluene type, tanks, group 3 gal. .14375- —
Lactic acid, edible, 50%, bbls., dms., c.l., frt. equald..lb. .1780- .2100
bbls., dms., 20 or more, frt. equald..lb. .1830- .2150
bbls., dms., 5 to 19, frt. equald. lb. .1880- .2200
bbls., dms., 1 to 4, frt. equald. lb. .1930- .2250
80%, c.l., bbls., dms., frt. equald. lb. .3030- .3600
bbls., dms., 20 or more, frt. equald..lb. .3080- .3650
bbls., dms., 5 to 19, frt. equald. lb. .3130- .3700
bbls., dms., 1 to 4, frt. equald. lb. .3180- .3750
Plastic grade, 50%, c.l., bbls., works..lb. .2100- —
bbls., 20 or more, works..lb. .2150- —
bbls., 5 to 19, works..lb. .2200- —
bbls., 1 to 4, works..lb. .2250- —
80%, bbls., c.l., works..lb. .3600- —
bbls., 20 or more, works..lb. .3650- —
bbls., 5 to 19, works..lb. .3700- —
bbls., 1 to 4, works..lb. .3750- —
Lactic acid, tech., 22%, bbls., c.l., works, 100 lbs. 6.30 • —
bbls., l.c.l., works..100 lbs. 6.70 • —
44%, bbls., c.l., works..100 lbs. 11.95 • —
bbls., l.c.l., works..100 lbs. 12.35 • —
USP, 85%, cyls..lb. .85 • .88
Lactose, edible, bgs., 23,000-lb. lots, frt. equald..lb. .14 • —
bgs., 6,000-lb. lots, frt. equald. lb. .14½- —
bgs., 2,000-lb. lots, frt. equald. lb. .14¾- —
bgs., 200-lb. lots, frt. equald..lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works..lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald. lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald. lb. .22¼- —
fib. dms., 200-1,800-lb. lots, frt. equald..lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.
Ladyslipper root, bls..lb. No stocks.
Lake C red toner, alizarine, bbls., works..lb. 1.20 • —
Lamp black, bgs., c.l., works..lb. .16 • .45
Lanolin, cosmetic, dms., works..lb. .27 • .29
USP, anhyd., mds., works..lb. .24 • .26
hydrous, dms., works..lb. .23 • .25
Lard, cash, dms., Chicago..lb. .1480- —
Lard oil (see Grease oil).
Larkspur seed, bgs..lb. .25 • —
Laurel leaf oil, dms., cns..lb. 9.75 -12.50
Laurent's acid, bbls..lb. .60 • —
Lauric acid, 90%, dms..lb. .35¾- .37¾
Lauryl alcohol, bots..lb. 2.00 • 2.50
Lauryl alcohol, bots..lb. 2.00 • 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works..lb. .65½- —
dms., l.t.l., dms., works..lb. .68 • —
Lavender flowers, medium, bls..lb. .75 • .80
Ord., bls..lb. .25 • .40
Select, bls..lb. .90 • —
Lavender flower oil, perfume grade, USP, French, 35-37% ester, cns..lb. 5.50 • —
Perfume grade, USP, French, 38-40% ester, cns..lb. 7.50 • —
40-42% ester, cns..lb. 9.00 • —
Spike, Spanish, cns..lb. 2.60 • —
Lavandin oil, dms., cns..lb. 2.55 • 2.95
Lead acetate, NF, cryst., gran., powd..lb. .36½- —
White, cryst., bbls..lb. .25½- —
gran., bbls..lb. .26½- —
powd., bbls..lb. .26½- —
Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more..lb. .27½- —
3-lb. bgs. or larger, l.c.l., frt. alld..lb. .28½- —
1-lb. bgs., c.l..lb. .41½- —
1-lb. bgs., l.c.l..lb. .42½- —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld..lb. .17¼- —
bbls., l.c.l., same basis..lb. .18¼- —
Lead carbonate (see Lead, white, basic cabonate).
Lead chloride, dms..lb. .45 • —
Lead iodide, NF V, jars..lb. 3.82 • —
Lead lineolate, fused, 26% Pb, dms. lb. .33 • —
Lead metal, pigs, prime, New York. lb. .16 • —
St. Louis..lb. .1580- —
Lead monosilicate, bgs., c.l., works, frt. equald..lb. .20 • —
bgs., l.c.l., same basis..lb. .2075- —
Lead naphthenate, liq., 16% Pb, dms., dlvd..lb. .17 • —
24% Pb, dms., dlvd..lb. .21 • —
Solid, 37% Pb, dms., dlvd..lb. .27½- —
Lead nitrate, bbls..lb. .23¾- —
Lead orthosilicate-gel, 50-60% PbO, dms., works..lb. .29¾- .34¼
Lead peroxide, tech., powd., bbls..lb. .38¾- .40¼
Lead phthalate, dibasic, dms., works. lb. .41 • —
Lead, red, 95% $Pb_3O_4$ or less, bbls., c.l., works, frt. alld..lb. .18¼- .19
bbls., l.c.l., same basis..lb. .19¼- .20
97% $Pb_3O_4$, bbls., c.l., same basis. lb. .1845- .192
bbls., l.c.l., same basis..lb. .1945- .202
98% $Pb_3O_4$, bbls., c.l., same basis. lb. .1935- —
bbls., l.c.l., same basis..lb. .2035- —
Lead resinate, precip., 23% Pb, dms., dlvd..lb. .32½- —
Lead salicylate, normal, dms., works. lb. .46 • —
Lead silicate, (see Lead, white, basic silicate).
Lead sulfate (see Lead, blue, basic sulfate).


# Now! Lemon oils "tailor-made" to your specific needs!

Now Exchange Lemon Oil California Cold-Pressed is tailor-made for your use.

Exchange Lemon Oil U.S.P., product specification Number 410, is the familiar favorite for extracts with supreme clarity, for exquisite character. Look for the gold line across the label.

Exchange Lemon Oil U.S.P., product specification Number 413, is recommended for emulsions and formulations specifying the whole unemulsified oil. This product is called Royal Line. Look for the blue line across the label.

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Exchange

LEMON OIL U.S.P.
CALIFORNIA COLD-PRESSED

**Sunkist Growers** PRODUCTS DEPARTMENT • ONTARIO, CALIFORNIA

*Distributed in the U.S. and Canada by*

DODGE & OLCOTT, INC. 180 Varick Street New York 14, N.Y.
FRITZSCHE BROTHERS, INC. 76 Ninth Avenue New York 11, N.Y.
UNGERER & COMPANY, INC. 161 Avenue of the Americas New York 13, N.Y.

*Inquiries from countries other than the U.S. and Canada should be directed to the Products Dept., Sunkist Growers.*

Lead tallate, liq., 16% Pb, dms...lb. .15 - —
24% Pb, dms. ....lb. .18½- —
Solid, 30% Pb, dms. ....lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld. lb. .19 - —
bgs., l.c.l., same basis....lb. .20 - —
Lead, white, basic, silicate., bgs., c.l., shipt. pt., frt. alld..lb. .17¼- —
bgs., l.c.l., same basis....lb. .18¼- —
Lead, white, basic sulfate, bgs., c.l., shipt. pt., frt. alld..lb. .17¼- —
bgs., l.c.l., same basis....lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis..lb. .16 - .17
Edible, tech., unbleached, non-ret. dms., c.l., same basis..lb. .13 - .14
non-ret. dms., l.c.l., same basis..lb. .15 - .16
Lemon bioflavonoid complex, fib. dms., 25-lb. lots, works..lb. 9.00 - —
Lemon oil, terpeneless, bots....lb. 50.00 -65.00
USP, Calif., cns., dms....lb. 4.00 - 5.00
Messina, cns. ....lb. 5.75 - —
Lemongrass oil, cns., dms....lb. 1.40 - —
dl-Leucine, dms., works....lb. 12.25 -15.00
Licorice root, gran., bls. ....lb. .15 - .17
Powd., bls. ....lb. .12 - .15
Whole, bls. ....lb. .10 - .12
Lignaloe wood oil, Mexican, cns..lb. 4.65 - 5.00
Lignosulfonate, 70% tannin, bgs., c.l., works..lb. .06½- —
bgs., l.c.l., works ....lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan New York destination, freight equalized with nearest producing pt...ton. 20.82 - —
Hydrated, bulk, c.l., same basis. ton. 22.32 - —
Spray, bgs., c.l., same basis..ton. 26.32 - —
Lime oil, dist., Mexican, cns....lb. 5.00 - 5.25
West Indian, cns. ....lb. 5.00 - —
Expressed West Indian, cns....lb. 6.00 - 8.00
Terpeneless, bots. ....lb. 50.00 -65.00
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Limestone grd., bgs., works..ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 3.65 - 4.80
Ex lignaloe wood oil, dms. ... lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms..lb. 3.30 - 5.10
96-98%, dms. ....lb. 4.05 - 6.75
Ex petitgrain, bots. ....lb. 4.80 - 5.90
Lindane, 25% formulation, dealers, dms., frt. alld..lb. 1.38 - 1.68
99%, tech., formulators, dms., frt. alld..lb. 2.65 - 3.25
Linden flowers, with leaves, bls..lb. .25 - —
Without leaves, bls. ....lb. .30 - —
Linseed meal, expeller, 32-34% bulk, Midwest mills..ton. 58.50 - —
Extracted, 36%, bulk, same basis. ton. 58.50 - —
Linseed oil, raw, dms., c.l., New York..lb. .1600- —
dms., l.c.l. ....lb. .1700- .1725
tanks, f.o.b. Minneapolis....lb. .1270- —
tanks, New York ....lb. .1410- —
tankwagon, New York....lb. .1440- .1450
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acids, dist., dms....lb. .1900- —
Water-white, dms....lb. .2200- —
Linseed pitch, dms. ....lb. .06 - .06¾
Litharge, coml., powd., bbls., c.l., works, frt. equald..lb. .17¾- .18
bbls., l.c.l., same basis....lb. .18¾- .19
Lithol red toner, bbls., works..lb. .93 - —
Lithol-rubine red toner, pure bbls., works. lb. 1.50 - —
Resinated, bbls., works....lb. 1.40 - —
Lithium benzoate, dms. ....lb. 1.65 - 1.67
Lithium bromide, NF, dms., works, frt. equald..lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd..lb. 1.29½- —
dms., ton lots to t.l., dlvd..lb. 1.30 - 1.30½
Tech., dms., c.l., t.l., dlvs., frt. alld. works..lb. .82 - —
dms., l.c.l., same basis....lb. .85 - 1.11½
Lithium chloride, CP, anhyd., ton lots..lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld..lb. 1.00 - 1.05
dms., l.c.l., same basis...lb. 1.05 - 1.05½
Lithium citrate, NF, dms. ....lb. 1.60 - 1.64
Lithium fluoride, bbls., 10,000-lb. lots, dlvd..lb. 2.17½- —
bbls., ton lots, dlvd. ....lb. 2.18½- —
bbls., less ton lots, dlvd. ....lb. 2.23½- —
Lithium hydride, powd., dms., 500-lots, works..lb. 10.50 -12.50
Lithium hydroxide, monohydrate, dms., dlvd..lb. .78 - —
Lithium manganite, dms., works..lb. .95 - 1.15
Lithium nitrate, tech., dms., 100-lb. lots..lb. 1.25 - —
Lithium salicylate, dms....lb. 1.60 - 1.70
Lithium silicate, dms., works...lb. 1.10 - 1.30
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works....lb. .48½- —
dms., less-ton lots, works....lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - —
Lithium titanate, dms., works....lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd E ....lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd..lb. .11 - —
bgs., l.c.l., dlvd....lb. .12 - —
Lobelia herb, bls. ....lb. 1.50 - —
Lobeline sulfate, bots., works..oz. 37.50 -38.50
Locust bean gum, powd., bgs...lb. .50 - —
Logwood extract, cryst., No. 1, bbls., l.c.l. lb. .41 - —
No. 2, bbls., l.c.l. ....lb. .39 - —
Liq. No. 1, bbls., l.c.l. ....lb. .20 - —
No. 2, bbls., l.c.l. ....lb. .19 - —
No. 3, bbls., l.c.l. ....lb. .18½- —
Solid, No. 1, boxes, c.l. ....lb. .35 - —
Lycopodium, cs. ....lb. 3.50 - —
dl-Lysine monohydrochloride, fib. dms..lb. 12.00 - —
l-Lysine monohydrochloride, fib. dms..lb. 12.00 -13.00

## M

Mace, Siauw, siftings, bls....lb. 3.25 - —
West Indian, No. 1, bls., shipment. lb. 3.25 - —
Mace oil, dist., cns., dms ....lb. 14.00 - —
Magnesia, calcined, tech., bgs., ctns., frt. equald. lb. .25¾- .26½
syn., rubber grade, light, bgs., c.l., frt. equald. lb. .29¾- .30½
rubber grade extra light, bgs., c.l., frt. equald. lb. .29¾- —
bgs., l.c.l., frt. equald.. lb. .30½- —
USP, light, bgs. ....lb. .36½- .37½
heavy, fib. dms. ....lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald. ton. 82.50 - —
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chawelah, Wash..ton. 46.00 - —

Magnesium bromide, cs., jars....lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald..lb. .10½- —
bgs., t.l., frt. equald....lb. .11 - —
bgs., l.c.l., frt. equald....lb. .12½- .13½
Magnesium carbonate, USP, bgs., c.l., frt. equald..lb. .13 - —
bgs., t.l., frt. equald....lb. .13½- —
bgs., l.c.l., frt. equald....lb. .14½- .15½
Above prices are quoted f.o.b. works, freight equald, with metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works..lb. .12¾- —
dms., l.c.l., works ....lb. .14 - .15
Hydrous, 99% flake, bgs., c.l., works..ton. 55.00 - —
bgs., l.c.l., works....ton. 65.00 -80.00
Magnesium gluconate, dms., cns..lb. 1.34 - 1.41
Magnesium hydroxide, NF, powd., bbls., dms., kgs....lb. .23½- .27
Magnesium metal, 99.8% ingots, 10,000-lb. lots or more, works..lb. .36 - —
Pigs, 10,000-lb. lots or more, works..lb. .35¼- —
Sticks, cs., works, frt. alld. on carlots..lb. .59 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium nitrate, cryst., dms., works..lb. .29 - —
Magnesium peroxide, 15%, dms., works..lb. 1.00 - 1.05
Magnesium phosphate, tribasic, NF, bbls..lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works..lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works..100 lbs. 2.15 - —
bgs., l.c.l., works....100 lbs. 2.90 - 3.15
Magnesium sulfate, USP, cryst., bgs., c.l., works..100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 3.10 - —
bgs., smaller lots....100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots..lb. .38 - —
fib. dms., 1,000-lb. lots....lb. .40 - —
fib. dms., 100-lb. lots....lb. .45 - —
Prices on maleic anhydride W. of Rockies, 1½c. per lb higher.
Malachite green, straight, PTMA, bbls., works..lb. 5.30 - —
Malathion, dms., c.l., works....lb. .90 - —
dms., l.c.l., works....lb. .92 - 1.02
Maleic acid, cryst., powd., dms..lb. .37 - .38
Maleic anhydride, dms., c.l., dlvd. E..lb. .28½- —
dms., l.c.l., dlvd. E....lb. .29½- —
tanks, dlvd. E....lb. .27½- —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Malic acid, tech., dms....lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots. lb. 2.35 - —
dms., smaller lots....lb. 2.40 - 2.50
Mandrake root, bls....lb. .55 - .60
Manganese acetate, bbls., dlvd..lb. .35 - —
Manganese arsenate, bgs. ....lb. .16 - —
Manganese borate, tech., fib. dms. lb. .25 - —
Manganese carbonate, bbls., works. lb. .22 - —
Manganese chloride, anhyd., dms., works lb. .25½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works ton. 148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis....ton. 144.50 - —
40,000 to 99,999-lb. lots, dms., same basis..ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Manganese gluconate, dms....lb. 1.80 - 1.94
Manganese hydrate, bbls., dlvd..lb. .36 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms..lb. .32½- —
Solid, precip., 8.2% Mn, bbls. lb. .37½- —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld..lb. .27 - —
Manganese resinate, fused, 3½% Mn, dms..lb. .24 - —
Precip., 6½-7% Mn, dms....lb. .28 - —
Manganese sulfate, fertilizer grade, 65% Mn, bgs., c.l., dlvd. S.E. ton. 88.55 - —
bgs., l.c.l., dlvd. S.E ....ton. 95.55 - —
Manganese tallate, 6%, dms....lb. .24 - —


# LITHIUM Base Grease:

Micrograph showing soap structure of lithium base lubricating grease made from 12-hydroxy stearic acid. Courtesy of Sinclair Research Laboratories, Inc.

ITS
**MULTI-Properties**
MAKE IT
**MULTI-Purpose**

### IN CHARACTERISTICS

- Non-corrosive
- Water resistant
- High heat resistance
- Rheological properties
- Eliminates abnormal wear
- Soap oxidation stability
- Cold operating properties
- Oxidation and shear stability
- Mechanically and chemically stable

### IN APPLICATION

- Prepacking anti-friction bearings
- Lubrication of plain and anti-friction rotating bearings
- Lubrication of vehicle chassis points, wheel bearings, universal joints and water pump
- Lubrication of high-temperature ball bearings
- Aircraft, artillery, instrument and general ordnance maintenance

### IN MARKETING

- Lower inventory
- Less dispensing equipment
- No chance for misapplication
- Reduction in lubricating time
- One grease lubricates a vehicle

### IN INDUSTRY

- Ordnance
- Manufacturing
- Farm equipment
- Transportation
- Industrial maintenance

### TEN YEARS PRODUCTION EXPERIENCE AT YOUR DISPOSAL

Lithium Corporation enjoys an established acceptance among grease makers—and for "multi-reasons" too: production experience, unsurpassed facilities, available inventory and immediate shipment—all combine to assure a reliable source of consistently uniform $LiOH\text{-}H_2O$. Since we are equally interested in developing better lithium products, why not get in touch with us on your lithium hydroxide problems? A card or letter will bring immediate response.

*... trends ahead in industrial applications for lithium*

LITHIUM CORPORATION OF AMERICA, INC.
2530 RAND TOWER, MINNEAPOLIS 2, MINN.

PROCESSORS OF LITHIUM METAL • METAL DISPERSIONS
METAL DERIVATIVES: Amide • Hydride
SALTS: Bromide • Carbonate • Chloride • Hydroxide • Nitrate
SPECIAL COMPOUNDS: Aluminate • Borate • Borosilicate • Cobaltite • Manganite
Molybdate • Silicate • Titanate • Zirconate • Zirconium Silicate

BRANCH SALES OFFICES: New York • Chicago • Bessemer City, N. C.
MINES: Keystone, Custer, Hill City, South Dakota • Bessemer City, N. C.
Cat Lake, Manitoba • Amos Area, Quebec
PLANTS: St. Louis Park, Minnesota • Bessemer City, N. C.
RESEARCH LABORATORY: St. Louis Park, Minnesota

Mangrove bark, E. African, 38% tannin, bgs., c.l., ex dock. ton 62.00 - —
South American, 30% tannin, bgs., c.l., ex dock ton 54.00 -57.00
Manila copal gum, C, bgs lb. .34¾- .38
CBB, bgs lb. No. stocks.
DBB, bgs lb. .25½- .28
DK, bgs lb. No stocks.
DK, dust., bgs lb. .14 Nom.
MA, soft, bgs lb. .19¾- .22
WS, bgs lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
bgs., l.c.l., works lb. .31 - —
Menadione, USP, bots gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .08¼ Nom.
Menthol, nat., USP, Brazilian, cs lb. 6.25 - 6.50
Syn., USP, racemic, cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .42 - —
bgs., fib. dms., less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .52 - —
bgs., fib. dms., less ton lots, same basis lb. .54 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
NF, gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Mercuric cyanide, NF, VIII, powd., fib. dms lb. 6.84 - —
Mercuric iodide, red, NF, fib. dms. lb. 7.72 - —
Mercuric oxide red, NF, powd., fib. dms lb. 5.97 - 6.01
Tech., c.l., works lb. 5.77 - —
Mercuric oxide yellow, bbls., 1,000-lb. lots lb. 5.58 - —
bbls., smaller lots lb. 5.60 - —
USP, fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Mercury metal, 76 lb. per flask. net-flask 255.00 -257.00
Mesityl oxide, dms., c.l., dlvd lb. .14 - .14½
dms., l.c.l., dlvd lb. .15 - .15½
tanks, dlvd lb. .11½- .12
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works lb. .47 - —
dms., smaller lots, works lb. .47½- .80
tanks, works lb. .45 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min., frt. alld. or dld gal. .48½- —
dms., l.c.l., works gal. .55½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. metropolitan area gal. .35½- —
tankwagon, 4,000 gal., min., frt. alld. or dlvd gal. .32½- —
tankwagon, 4,000 gal. min., works, Carteret, Camden, N. J. gal. .29½- —
Syn., zone 2, dms., c.l., or t.l. min. frt. alld. or dlvd gal. .51½- —
dms., l.c.l., works gal. .58½- —
tankwagon, 2,000-4,000-gal. lots., min., dlvd. metropolitan areas gal. .38½- —
tanks. 4,000 gal., min., frt. alld. or dlvd gal. .35½- —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld lb. .61 - .64

Methyl abietate, non-ret. dms., c.l., dlvd, zone 1 lb. .20½- —
Non-ret. dms., l.c.l., same basis lb. .21 - —
Methyl abietate, hydrogenated non-ret. dms., c.l., dlvd., zone 1 lb. .21 - —
Non-ret. dms., l.c.l., same basis lb. .21½- —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala. Ga.; Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
Syn., dms., c.l., frt. alld. E gal. .63½- —
dms., l.c.l., frt. alld. E gal. .69½- —
tanks, frt. alld. E gal. .48½- —

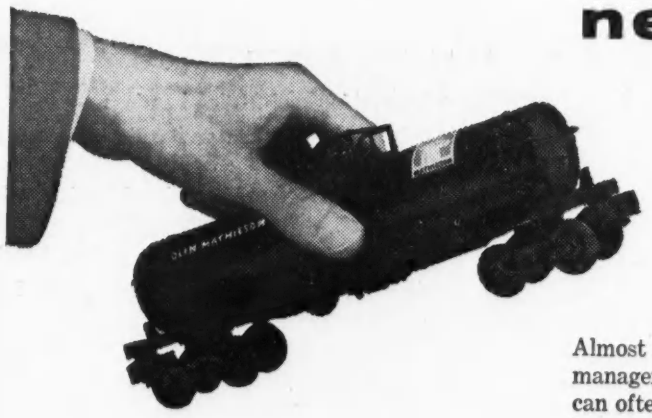
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .16½- —
dms., l.c.l., dlvd. E lb. .17½- —
tanks, dlvd. E lb. .14 - —
Methylamyl alcohol (see Methyl isobutyl carbinol).
Methylamyl ketone, dms., works lb. 1.05 - —
Methyl anthranilate, cns. lb. 2.35 - 2.65
Methyl benzoate, cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .65
Methyl cellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100-lbs lb. .79 - .89
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd lb. .48¾- —
other consumers or service men,, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-trichloroethane).
Methyl cinnate lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .14½- —
dms., l.c.l., dlvd lb. .15½- —
tanks, dlvd. lb. .12 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity works lb. .10 - —
Methyl heptin carbonate, bots lb. 31.00 -42.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 5.00 - 5.25
Methyl isobutyl carbinol, dms., c.l., dlvd. lb. .16½- —
Dms., l.c.l., dlvd lb. .17½- —
tanks, dlvd. lb. .14 - —
Methyl isobutyl ketone, dms., c.l., dlvd. lb. .16½- —
dms., l.c.l., dlvd lb. .17½- —
tanks, dlvd. lb. .14 - —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns. lb. 3.00 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 - —
Methyl salicylate, USP, cns., 500-lb. lots lb. .62 - —
Methyl testosterone, USP, 100-gram bots gram. .68 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.80 - —
Methyl violet toner, tungstated, PTMA, bbls., same basis lb. 4.35 - —

Methyl violet toner dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

2-Methylbenzylamine, dms., l.c.l., works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —
dms., l.c.l., works lb. 1.90 - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .445 - —
dms., l.c.l., works lb. .45 - —
tanks, works lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Methylene chloride, tech., dms., c.l., t.l., straight or mixed works lb. .14 - —
dms., l.c.l., l.t.l., works lb. .16¾- —
tanks, 4,000-gal, min., tank trucks, max. load limit works lb. .12½- —
tank trucks, 1,000-gal. min., works lb. .13½- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylipyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
bgc., l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse or frt. alld. E. lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse. or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E. lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 - —
Mica, wet-grd., white, 5-10 microns, bgs., c.l., works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse. or frt. alld. E. lb. .09 - —

Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.

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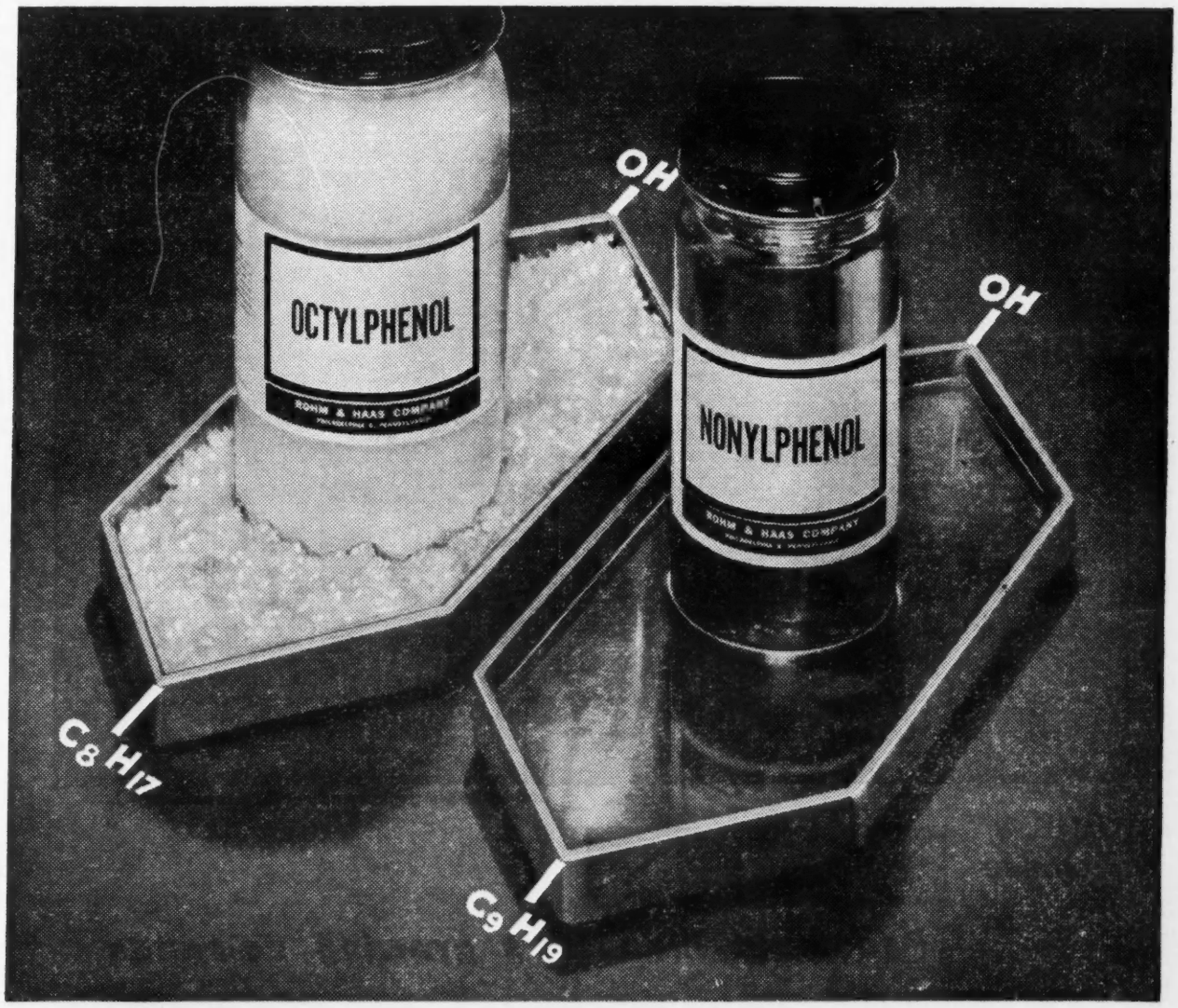
4662

Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. New York gal. .59 - —
Tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .60 - —
non-ret. dms., l.c.l., same basis gal. .68 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .61 - —
non-ret. dms., l.c.l., same basis gal. .68 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .67 - —
non-ret. dms., l.c.l., same basis gal. .77 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .73½- —
non-ret. dms., l.c.l., same basis gal. .80½- —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .75 - —
non-ret. dms., l.c.l., same basis gal. .82 - —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., l.c.l., f.o.b. New York gal. .85 - —
non-ret. dms., l.c.l., same basis gal. .80½- —
Mineral orange, American, bbls., l.c.l., works lb. .2235- —
Mineral spirits, petroleum, odorless, tanks, refy., Watson, Calif. gal. .25 - —
tanks, Borger, Tex. gal. .25 - —
Houston, Tex. gal. .25 - —
Philadelphia gal. .32 - —
Newark, dlvd. gal. .3328- —
New York, dlvd. gal. .34½- —
Wood River, Ill. gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —
Reg., tanks, Calif., ex tax San Francisco gal. .169 - —
tanks, east coast New Jersey, New York gal. .18 - —
tanks, group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Buffalo gal. .20½- —
Chicago gal. .289 - —
Cleveland gal. .23½- —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Providence gal. .20½- —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .24½- .25
tanks, New York gal. .28 - —
Molybdated orange, bbls. lb. .48 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, pure, dms., works lb. 1.15 - —
Tech., dms., works, basis Mo content lb. 1.39 - —
Molybdic acid, 85%, dms., works lb. 1.20 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .53½- —
dms., l.c.l., same basis lb. .56½- —
tanks, same basis lb. .53 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 - —
dms., l.c.l., same basis lb. .11 - —
tanks, same basis lb. .08½- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd. E. lb. .37½- —
dms., l.c.l., dlvd. E lb. .38½- —
tanks, dlvd. E lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .25 - —
Monoisopropylamine, dms., c.l., dlvd. lb. .32½- —
dms., l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 - —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis lb. .40 - —
dms., l.c.l., frt. equald, 100% basis lb. .40½- —
tanks, frt. equald, 100% basis. lb. .31 - —
40% soln., dms., frt. equald, 100% basis lb. .37 - —
dms., l.c.l., frt. equald, 100% basis lb. .37½- —
tanks, frt. equald, 100% basis. lb. .31 - —
Monosodium glutamate, dms., c.l. lb. 1.15 - —
dms., l.c.l. lb. 1.23 - 1.27
Monosodium phosphate, (see Sodium phosphate, monobasic).
Montan wax, dom., refd., bgs. lb. .29 - .30
Imp., crude, Bohemian, bgs. lb. .26 - .28
German, bgs lb. .35 Nom.
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine, cns oz. 12.40 -12.60
Morphine actate, anhyd., cns oz. 9.95 -10.00
Morphine hydrobromide, cns oz. 9.90 - 9.95
Morphine hydrochloride, NF, cns. oz. 9.90 - 9.95
Morphine sulfate, USP, cns oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .53¼- —
dms., l.c.l., dlvd E lb. .56¼- —
tanks, dlvd. E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.45 - 5.15
Syn., ambrette, cns., 25-lb. lots lb. 5.05 - 5.65
cns., 5-lb. lots lb. 5.20 - 5.50
Ketone, fib. dms., 100-lb. lots lb. 4.70 - 5.30
cns., 25-lb. lots lb. 5.35 - —
cns., 5-lb. lots lb. 5.45 - —
xylol, fib. dms., 100-lb. lots lb. 1.40 - —
cns., 25-lb. lots lb. 1.45 - —
cns., 5-lb. lots lb. 1.50 - —
Mustard seed, Danish, yellow, bgs. lb. .10½- —
Dutch, bgs lb. .10½- —
English, yellow, bgs lb. .11 - —
Montana, oriental, bgs lb. .08½- Nom.
yellow, bgs lb. .10½- —
Mustard seed oil, nat. dms. lb. .17¼ Nom.
Syn., bots. lb. 1.60 - 1.85
Myristic acid, dms. lb. .26 - .28
Myrobalans, Bombay, bgs., ex dock ton. 57.00 -58.00
J-1, genuine, bgs., ex dock ton. 62.00 -63.00
J-1, crushed, bgs., ex dock ton. 79.00 -80.00
Myrobalans extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼
Myrrh gum, cs. lb. .55 - —

## N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, 140°F. flash, tanks, east coast, New Jersey and New York gal .18 - —
tanks, group 3 gal. .155 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles gal. .174 - —
tanks, Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash. gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 gal. .13875- —
tankwagon, Boston gal. .21½- —
Chicago gal. .299 - —
Cleveland gal. .24½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21½- —
Pittsburgh gal. .20 - —
Naphthalene, crude, dom., 74°, tanks, tanks, frt. equald lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
bgs., l.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 - —
Naphthalene, crude, imp., 78°, bgs., large lots lb. .05 Nom.
Refd., indust., chipped, crushed, bgs., frt. alld. lb. .12½- —
tanks, same basis. lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs, 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis lb. .18½- —
1-Naphthol-4 sulfonic acid (see Neille and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
Naphthol sulfonic mived acid (see Cleve5s acid).
1-Naphthylamine-5-sulfonic acid (see Laurents acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Napthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
a-Naphthol bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., l.c.l., works lb. .35 - —
Naphthol ITR red toner, bbls., works lb. 5.50 - —
a-Naphthylamine, bbls., frt. alld lb. .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Naringin, fib. dms. lb. 8.50 - —
Neatsfoot oil, 15° cold test, dms lb. .30 - .33
20° cold test, dms. lb. .29 - .32
30° cold test, dms lb. .28 - .31
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .45 - —
fib. dms., 100-999-gram lots, basis activity gram. .50 - —
Neroli oil, NF, French bots lb. 575.00 - —
Nerolin, cns. lb. 2.45 - 2.65
Nevile and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .73 - .80
Nickel carbonate, bbls., dlvd lb. .80¾ - .87¾
Nickel chloride, bbls., dlvd. lb. .40½- .48¼
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb. .74 - —
Nickel nitrate, bbls., works lb. .32½- .33¼
Nickel oxide, black, bbls. lb. .84 - —
Green, bbls. lb. .85 - —
Nickel sulfate, bgs., c.l., dlvd. lb. .32½- —
bgs., l.c.l., dlvd. lb. .33½- .40¼
Nicotinamide USP, dms., frt. adjusted kilo. 9.50 - 9.80
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 9.50 - 9.80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40%, manufacturers, 500-lb. dms., frt. alld. lb. 1.05 - —
Nicotinic acid, USP, dms., dlvd. kilo. 8.00 - 8.30
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .12 - .12½
Nikethamide, cbys. lb. 7.50 - —
Nitric acid, 36° Be., cbys., c.l., works, E 100 lbs. 5.75 - —
cbys., l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works, E. 100 lbs. 6.25 - —
cbys., l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be. cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys., l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% $HNO_3$, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% $HNO_3$, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, cbys., extra, l.c.l., same basis. c.l., works lb. .18½- —
lb. .20 - .20½
5-pt. bots, extra, cs., c.l., same basis lb. .22½- —
5-lb. bots., extra, cs., l.c.l., same basis lb. .24 - .25
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld., 100% basis. lb. 1.10 - —

o-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 - —
dms., l.t.l., frt. alld. lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms., frt. alld. lb. .445 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .14 - —
dms., l.c.l., frt. alld. lb. .15 - —
tanks, frt. alld. lb. .12 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .72 - —
dms., l.c.l., works lb. .73 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
bbls., l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis lb. .36 - —
bbls., l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
bbls., l.c.l., same basis lb. .40 - .42
Spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
bbls., l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
bbls., l.c.l., same basis lb. .41 .43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l., frt. alld. lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-4-chlorophenol, dms. lb. .75 - —
Nitroethane, dms., c.l., dlvd. E. lb. .24 - —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E. lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald. unit. 1.20 - —
Nitrogenous process tankage, bulk, works unit-ton. 3.00 - 4.00
Nitrogenous sewage sludge, bulk, works, unit-ton. 2.95+ .50
Nitromethane, dms., c.l., dlvd. E lb. .24 - —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E. lb. .22½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .41 - —
Nitropropane-1 and nitropropane-2, dms., c.l., dlvd. E lb. .22½- —
dms., l.c.l., dlvd. E lb. .23¼- —
tanks, dlvd. E lb. .21 - —
Nitropane prices West of Rockies are 1c. higher.
o-Nitrophenol, dms, works, frt. equald. lb. .94 - —
p-Nitrophenol, dms., frt. alld., c.l., lb. .51 - —
dms., l.c.l. lb. .53 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 - —
Nitropropane-1 and Nitropropane-2, dms., l.c.l., frt. alld. lb. .27½- —
tanks, frt. alld. lb. .09 - —

p-Nitrotoluene, dms., works lb. .33 - —
m-Nitro-p-toluidine, dms. lb. 1.59 - —
Nitrous ether, conc., bots., 100-lb. lots lb. 1.28 - 1.35
Nonyl phenol, dms., c.l., frt. alld. lb. .26½- —
dms., l.c.l., frt. alld. lb. .11 - —
tanks, frt. alld. lb. .24½- —
Nutgalls, Aleppo, bgs. lb. .35 - .38
Chinese, bgs. lb. No prices.
Nutmeg, East Indian, bgs. lb. 2.80 - —
West Indian, bgs. lb. 2.80 - —
Nutmeg oil, USP, dist., East Indian, cns., dms lb. 15.00 - —
USP, dist., West Indian, cns., dms. lb. 14.50 - —
Nux vomica, bls lb. .10 - .12
Powd., bbls., bxs lb. .15 - .17

## O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .55 - —
Octane, indust., tanks, Bayonne, N. J. gal. .19 - —
tanks, Baytown, Tex. gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd. lb. .35 - —
dms., l.c.l., dlvd. lb. .37 - —
tanks, dlvd. lb. .32½- —
Octyl alcohol, perfumer's grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .24 - —
bgs., l.c.l., works lb. .24½- —
tanks, works lb. .23 - —
Octyl phenol in dms., 11c. higher.

### Oils

Oil quotations, formerly grouped under one heading, are now listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms lb. .18¾- .19
tanks lb. .17¼- —
Oleic acid, dbl.-dist. (white), dms. lb. .19¾- .21¾
tanks lb. .17¾- —
Single-dist., dms lb. .17¾- .19¾
tanks lb. .15¾- —
Oleo oil, extra, dms. lb. .18¾- .19
Oleostearine, dms lb. .13 - .13½
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .20 Nom.
Tears, cs lb. .22 - .30
Olibanum oil, bots lb. 5.50 - 7.65
Extra fine, bots lb. 8.00 - 9.00
Olive oil, edible, Spanish, dms., duty-paid gal. 3.70 Nom.
Edible, Tunisian, dms., same basis. lb. 3.10 - 3.15
Opium, USP, cns oz. 19.20 -19.45
USP, gran., cns oz. 21.65 -21.90
powd., cns oz. 21.65 -21.90
Orange oil, expressed, USP, Brazilian, cns., dms lb. No stocks.
Expressed, USP, Calif., cns., dms. lb. .75 - —
Florida, cns., dms lb. .55 - —
Messina, cns lb. 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.65
Sesquiterpeneless, bots lb. 65.00 -120.00
Sweet, dist., cns., dms lb. .45 - .80
Orange peel, bitter, Haitian, bls lb. .14 - .16
Sweet, bls lb. .16 - .18

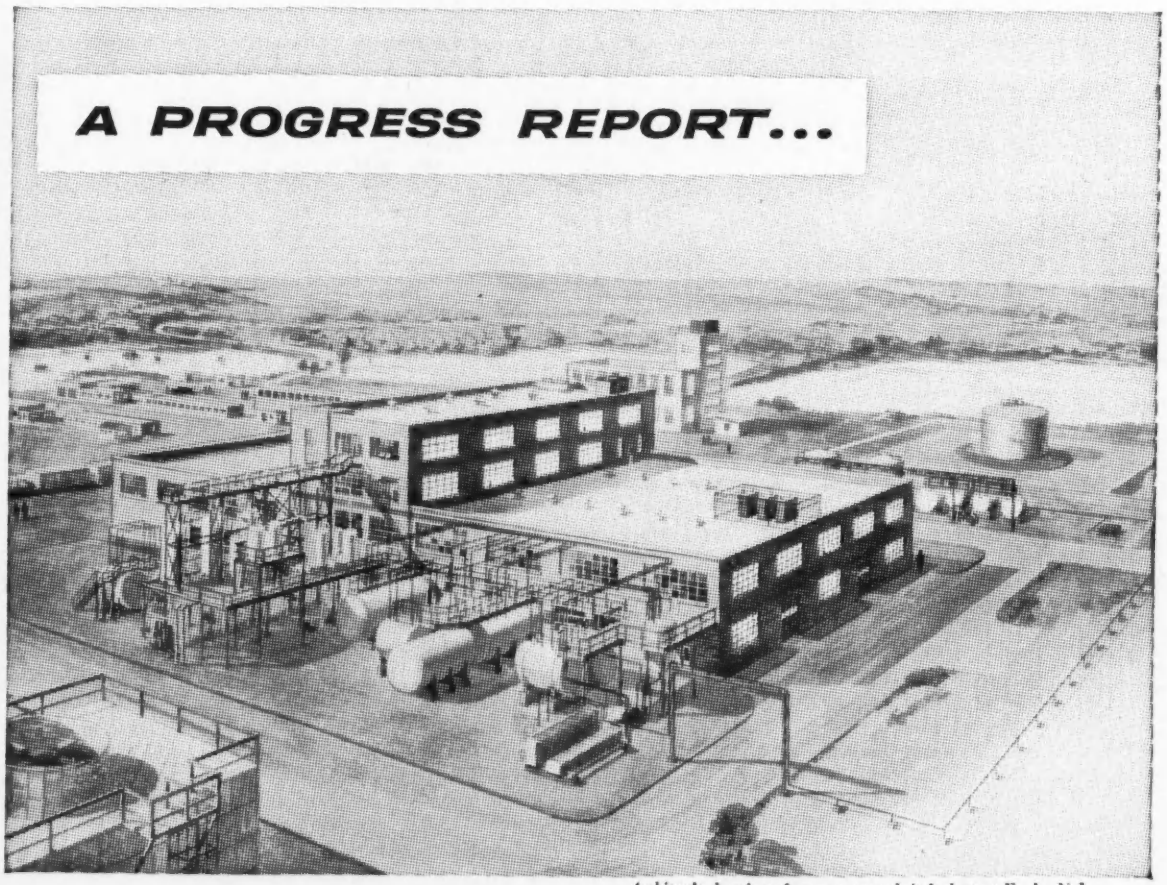
### Orange Pigments

Orange pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb. 2.00 - —
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .68 - —
Verona, bls lb. .35 - .40
Orthoanisidine (see o-Anisidine).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Osage orange, cryst., No. 1, bbls. l.c.l lb. .40 - —
Extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Ouricury wax, refd., pure, bgs lb. .85 - .86
Tech., bgs lb. .80 - .82
Oxalic acid, bbls., c.l., works lb. .16½- —
bbls., 10,000-lb. lots, works lb. .16¾- —
bbls., smaller lots, works lb. .17¾- —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Oxyquinolin sulfate, cns. 100-lb. lots, works lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

## P

Palm oil, clarif., dms lb. .15¼- .16¼
Palm oil acids, dist., dms. lb. .14¾- .16¾
tanks lb. .12¾- —
Palmarosa oil, cns. lb. 6.50 - —
Papain, USP, African, bots, lb. 5.50 - 6.00
USP, Ceylon, bots. lb. 6.00 - 6.25
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Rumanian, bgs lb. .26 - —
Spanish, bgs. lb. .60 - —
Yugoslavian, bgs. lb. .35 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).


*Architect's drawing of new pentaerythritol plant at Fords, N.J.*

**more PENTEK® to meet industry's growing demands**

A new plant—with an annual capacity of 25,000,000 pounds—will be on stream this summer—turning out Heyden Newport's full line of Pentek® brand pentaerythritols.

This marks the fourth major expansion of its pentaerythritol manufacturing facilities since Heyden developed the first commercial production of Pentek some twenty years ago. It maintains Heyden Newport's position as the world's leading producer of this versatile polyol.

• • •

A major producer of organic chemicals for a wide diversity of fields, Heyden Newport assures you of a dependable source of quality products meeting modern industries' most exacting requirements.

Our sales and technical staffs are at your service—convenient distribution points make stocks readily available to you.

**Heyden Newport divisions serving the process industries:**

NEWPORT INDUSTRIES COMPANY
producers of naval stores, tall oil fatty acids, and fine chemicals derived from wood.

NUODEX PRODUCTS COMPANY
manufacturers of additives and special purpose chemicals for paints, plastics, textiles, paper and metal plating industries.

HEYDEN NEWPORT CHEMICAL CORPORATION
342 Madison Avenue—New York 17, New York

For shoe polish...

**ALCOA'S KING-SIZE LIPSTICK-TYPE TUBE**

This handy new aluminum shoe polish dispenser made by Alcoa® spreads stick-form polish by using the principle common to lipstick tubes. Alcoa developed this special dispenser for a special job. If your product needs an economical rigid package with utility value and sales appeal, Alcoa is ready to work with you.

Alcoa research, package development and product testing are recognized as the standard of the industry. These facilities are readily available to you through the 64 sales offices which Alcoa has located at convenient points across the nation. Your package will be superior, our service reliable.

Aluminum Company of America
1712-D Alcoa Building, Pittsburgh 19, Pa

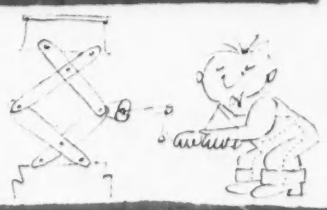
*We are interested in packaging _____ in Alcoa Rigid Containers. Please have an Alcoa salesman contact us.*

Name _____

Firm _____

Street Address _____

City and State _____



BETTER PACKAGING IN ALCOA CONTAINERS

*Your Guide to the Best in Aluminum Value*

Pe
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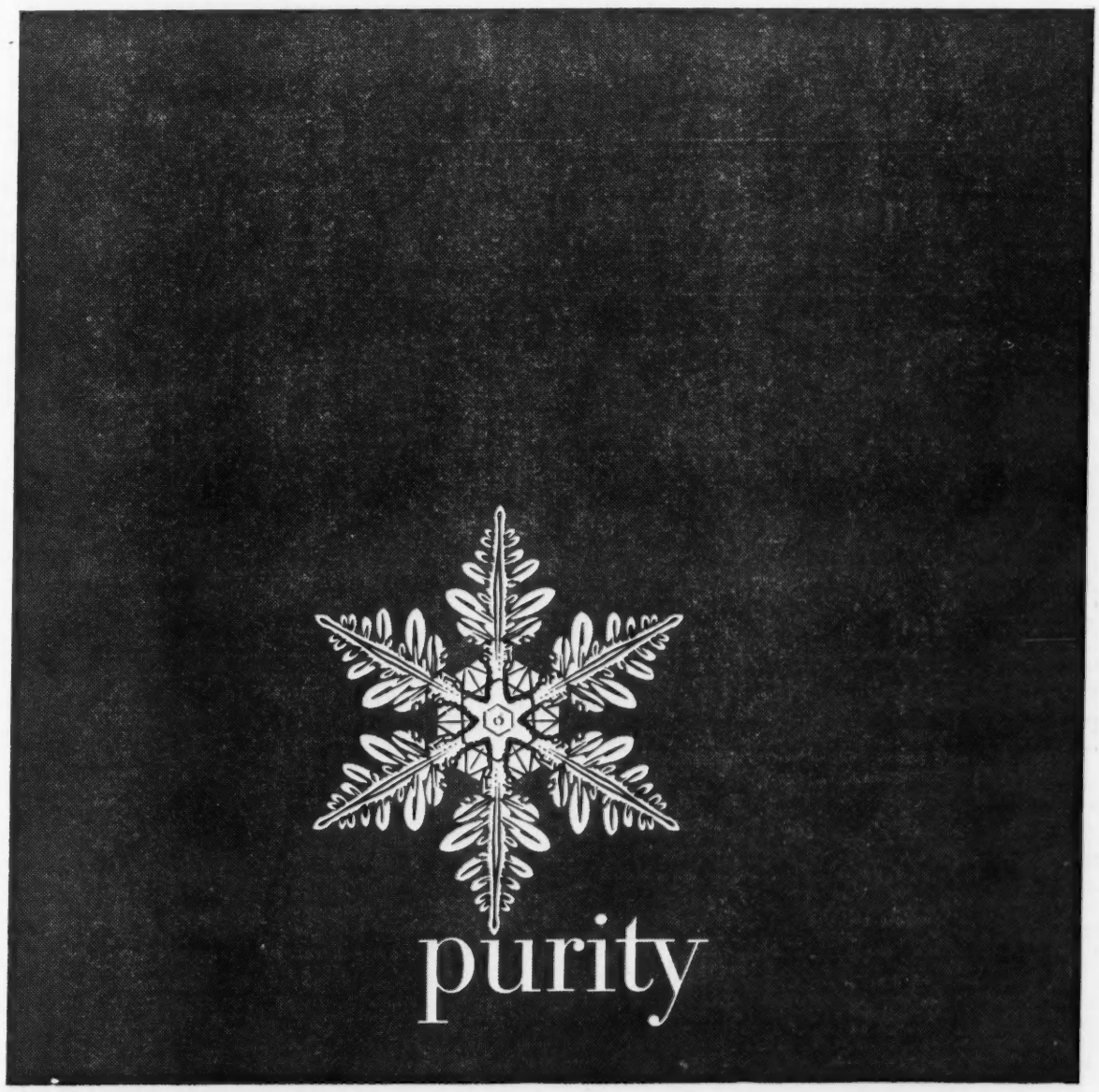
Para-aminosalicylic acid (see p-Aminosalicylic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).

| | | |
|---|---|---|
| Para toner, red, bbls | lb. 1.15 | - — |
| Chlorinated, kgs. | lb. 1.30 | - — |
| Paraffin, crude, scale white, 123°-127°F, ASTM, tanks, refy. | lb. .0710 | — |
| Fully refd., 122°-124°F, ASTM, tanks, refy. | lb. .0815 | — |
| 125°-127° F, ASTM, tanks, refy. | lb. .0815 | — |
| 130°-132°F, ASTM, tanks, refy. | lb. .0815 | — |
| 132°-134°F, ASTM tanks, refy. | lb. .0815 | — |
| 135°-137°F, ASTM, tanks, refy. | lb. .0815 | — |
| AMP temperatures are an arbitrary 3°F. higher than ASTM. | | |
| Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy. | gal. .14 | - — |
| Paraffin wax (see Paraffin). | | |
| Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld. | lb. .11¼ | - — |
| bgs., l.c.l., frt. alld | lb. .13¼ | - .14¼ |
| 91%, powd., bgs., c.l., ex whse | lb. .167 | - — |
| bgs., l.c.l., ex whse | lb. .182 | - — |
| USP X, fib. dms., c.l. | lb. .19 | - — |
| fib. dms., 1,000-lb. lots | lb. .20 | - — |
| fib. dms., smaller lots | lb. .21½ | - — |
| Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. | lb. .14 | - — |
| 55-gal dms., l.c.l., dlvd. | lb. .15 | - — |
| tanks, dlvd. | lb. .11½ | - — |
| Paranitroaniline (see p-Nitroaniline). | | |
| Paranitrochlorobenzene (see p-Nitrochlorobenzene). | | |
| Paranitrotoluene (see p-Nitrotoluene). | | |
| Paranitrophenol (see p-Nitrophenol). | | |
| Paraphenetidine (see p-Phenetidine). | | |
| Paraphenylenediamine (see p-Phenylenediamine). | | |
| Paraphenylphenol see p-Phenylphenol). | | |
| Para-tertiary-amylphenol (see p-tert-Amylphenol). | | |
| Para-tertiary butylphenol (see p-tert-Butylphenol). | | |
| Parathion, spray powder, 15%, dealers, bgs., dms., frt. alld. | lb. .50 | - .53 |
| Tech., dms., c.l., t.l., works | lb. 1.3395 | - — |
| dms., l.c.l., works | lb. 1.51 | - — |
| Paratoluenesulpnonamide (see p-Toluenesulfonamide). | | |
| Paris green, dealers, dms., c.l., frt. alld. | lb. .44 | - .47 |
| dms., l.c.l., same basis | lb. .45 | - .48 |
| Passion flower herb, bls. | lb. .25 | - — |
| Patchouli oil, dms. | lb. 6.00 | - — |
| Peach kernel oil, USP, (see Apricot kernel oil). | | |
| Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd., N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis | lb. .90 | - — |
| Peacock blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago. | | |
| Peanut meal, 45%, old process, bgs., mills | ton.45.00 | - — |
| Solvent extracted, bgs., mills | ton.42.00 | - — |
| Peanut oil, crude, tanks, f.o.b. mills. | lb. .14 | - — |
| Refd., dms. | lb. .19¾ | - .20 |
| tanks | lb. .17¾ | - — |
| Pectin, citrus, dom., powd., bbls. | lb. 2.05 | - 2.06 |
| Dom., tech., powd., bbls. | lb. 1.35 | - — |
| Imp., Danish, ex whse. | lb. 1.28 | - — |
| Penicillin, potassium, cryst., bulk | 1,000,000 units. .0675 | - .0700 |
| Penicillin, procaine, bulk | 1,000,000 units. .0675 | -.0700 |
| Penicillin, sodium, bulk | 1,000,000 units. .0775 | - .0800 |
| Pennyroyal oil, USP, imported, cns. | lb. 2.75 | - 3.50 |
| Pentachlorophenol, dms., c.l., t.l., works, frt. equald. | lb. .22 | - — |
| dms., l.c.l., same basis | lb. .23½ | - .30 |
| Pentaerythritol, tech., bgs., c.l., works | lb. .32 | - — |
| bgs., l.c.l., works | lb. .33 | - — |
| Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol). | | |
| Pentane, indust., tanks, Tex. refy. | gal. .14 | - — |
| Pepper, black, Malabar, spot bgs. | lb. .28½ | - — |
| Red, Gondar, spot, bgs. | lb. No prices. | |
| Japanese, hontaka, bgs. | lb. .34 | - — |
| Japanese, birdseyes, bgs. new crop | lb. No prices. | |
| Mombasa, bgs., shipt. | lb. .56 | - .57 |
| Nigerian, bgs. | lb. .42 | - — |
| Turkish, bgs. | lb. .28 | - — |
| White, bgs. | lb. .35 | - .36 |
| Peppermint leaves, dom., USP, bls., dms. | lb. .70 | - .75 |
| Imp., USP, bls. | lb. .85 | - — |
| Peppermint oil, nat., dms. | lb. 4.75 | - 6.50 |
| Redist., USP, dms. | lb. 5.25 | - 6.75 |
| Perchloroethylene, dms., c.l., or t.l., dlvd. | lb. .13½ | - — |
| dms., l.c.l., dlvd | lb. .15¼ | - — |
| tanktruck, 1,000 gal., min., dlvd. | lb. .12¾ | - — |
| tanks, dlvd | lb. .12¼ | - — |
| Peri acid, dry, bbls., frt. alld | lb. 1.35 | - — |
| Paste, bbls., frt. alld | lb. 1.30 | - — |
| Persic oil, USP (see Apricot kernel oil). | | |
| Peru balsam, dms. | lb. 1.25 | - 1.50 |
| Petitgrain oil, South American, cns., dms | lb 3.00 | - — |
| Petrolatum, cream, dms., c.l., refy. | lb. .07½ | - — |
| dms., l.c.l., dlvd. | lb. .09¾ | - — |
| tanks, refy. | lb. .05¼ | - — |
| Extra amber, dms., c.l., refy. | lb. .06½ | - — |
| dms., l.c.l., dlvd. | lb. .08¼ | - — |
| tanks, refy. | lb. .04¼ | - — |
| USP, lily white, dms., c.l., refy. | lb. .07⅞ | - — |
| dms., l.c.l., dlvd | lb. .10¼ | - — |
| tanks, refy. | lb. .05¾ | - — |
| snow white, dms., c.l., refy. | lb. .08⅛ | - — |
| dms., l.c.l., dlvd | lb. .10⅝ | - — |
| tanks, refy | lb. .06⅛ | - — |
| soft yellow, dms., c.l., refy. | lb. .06½ | - — |
| dms., l.c.l., dlvd | lb. .08¼ | - — |
| tanks, refy | lb. .04¼ | - — |
| Petroleum pitch (see Asphalt, petroleum). | | |

### *Petroleum Products*

Petroleum product quotations, formerly grouped under one heading, are now listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

| | | |
|---|---|---|
| Petroleum sulfonates, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works | lb. .16½ | - .18¾ |
| non-ret. dms., l.c.l., works | lb. .17½ | - .19 |
| tanks, works | lb. .14½ | - .17 |
| 50-55% sulfonic content, non-ret. dms., c.l., works | lb. .16 | - — |
| non-ret. dms., l.c.l., works | lb. .17 | - — |
| tanks, works | lb .13 | - — |
| o-Phenetidine, dms., c.l., frt. alld. E | lb. .91 | - — |
| dms., l.c.l., same basis | lb. .93 | - — |
| p-Phenetidine, dms., c.l., frt. alld. | lb. 1.05 | - — |
| dms., same basis | lb. 1.08 | - — |
| Phenobarbitol, USP, dms., 100-lb. lots | lb. 3.25 | - — |
| Phenobarbital-sodium, USP, dms., 100-lb. lots | lb. 3.25 | - — |
| Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies | lb. .17¾ | - .18 |
| non-ret. dms., l.c.l., same basis. | lb. .18¼ | - .19 |
| tanks, same basis | lb. .16 | - — |
| Phenol, 82-84% (cresol 16-18%), non-ret. dms., c.l., same basis | lb. .17½ | - — |
| non-ret. dms., same basis | lb. .18½ | - — |
| tanks, same basis | lb. .15½ | - — |
| 39°C. or above, tar distilled non-ret. dms., c.l., same basis | lb. .19¼ | - .19½ |
| non-ret. dms., l.c.l., same basis. | lb. .19¾ | - .20½ |
| tanks, same basis | lb. .17½ | - — |
| USP, syn., dms., c.l., t.l., frt. alld | lb. .20 | - — |
| dms., same basis | lb. .22 | - — |
| tanks, same basis | lb. .18 | - — |
| Phenolphthalein, USP or yellow, fib. dms., 2,000-lb. lots | lb. 1.15 | - — |
| fib. dms., smaller lots | lb. 1.17 | - 1.22 |
| Phenothiazine, drench, fib. dms., t.l., frt. adjusted | lb. .44 | - — |
| fib. dms., l.t.l., same basis | lb. .47 | - — |
| NF, fib. dms., t.l., same basis | lb. .43 | - — |
| fib. dms., l.t.l., same basis | lb. .46 | - — |
| Phenyl acetate, dms., 100-lb. lots, works | lb. .50 | - — |
| Phenyl salicylate (see Salol). | | |
| Phenylacetaldehyde, soln., 50%, bots | lb. 2.40 | - 2.70 |
| 100%, bots | lb. 4.00 | - 4.65 |
| Phenylacetic acid, pure, cryst., cns. | lb. 1.45 | - 1.75 |
| dl-Phenylalanine, dms., works | lb.27.00 | -37.50 |
| l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E. | lb. 3.45 | - — |
| fib. dms., smaller lots, dlvd. E | lb. 3.80 | - — |
| N-Phenyldiethanolamine, dms., c.l., dlvd. E | lb. .40½ | - — |
| dms., l.c.l., dlvd. E | lb. .41½ | - — |
| tanks, dlvd. E | lb. .38½ | - — |
| m-Phenylenediamine, dms., frt. alld. | lb. .95 | - — |
| m-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works | lb. 1.70 | - 1.80 |
| o-Phenylenediamine, refd., tech., dms., works | lb. 1.42 | - — |
| p-Phenylethanolamine, dms., c.l., works | lb. .75½ | - — |
| dms., l.c.l., same basis | lb. .76¼ | - — |
| Phenylethyl acetate, bots | lb. 1.25 | - 1.60 |
| 2-Phenylethyl alcohol, extra, dms. | lb. 1.14 | - 1.45 |
| Standard, dms | lb. 1.10 | - 1.60 |
| Phenylglyconic acid (see Mandelic acid). | | |
| Phenylhydrazine base, CP, btos | lb. 3.00 | - 3.07 |
| Phenylhydrazine hydrochloride, coml., kgs., works | lb. 1.75 | - — |
| Purif., bots., works | lb. 5.17 | - — |
| 1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E | lb. 1.80 | - — |
| fib. dms., smaller lots, dlvd. E | lb. 2.10 | - — |
| Phenylethylphenyl acetate, bots | lb. 4.15 | - 4.35 |
| o-Phenylphenol, dms., l.c.l., works. | lb. .42 | - .44 |
| p-Phenylphenol, bgs., c.l., works | lb. .37 | - — |
| bgs., l.c.l., works | lb. .41½ | - — |
| Philippine copal gum, pale, chips, bgs | lb. .25½ | - .28 |
| Pale, nubs, bgs | lb. .32½ | - .36 |
| seeds, bgs | lb. .20 | Nom. |
| sorts, bgs | lb. .23½ | - .26 |


*PENOLA SOLVENTS FOR BETTER PROCESSING*

Penola solvents — like all Penola products — undergo rigid laboratory testing for absolute purity. This is your guarantee of efficient, economical processing. In addition, Penola offers you:

*FAST DELIVERY* — Penola's many storage points and excellent shipping facilities assure immediate availability and fast delivery to your lab or plant.

*TECHNICAL ASSISTANCE* — Penola's staff of experts will be glad to advise on your processing problems or supply any technical data you require. Just call or write your nearest Penola office!

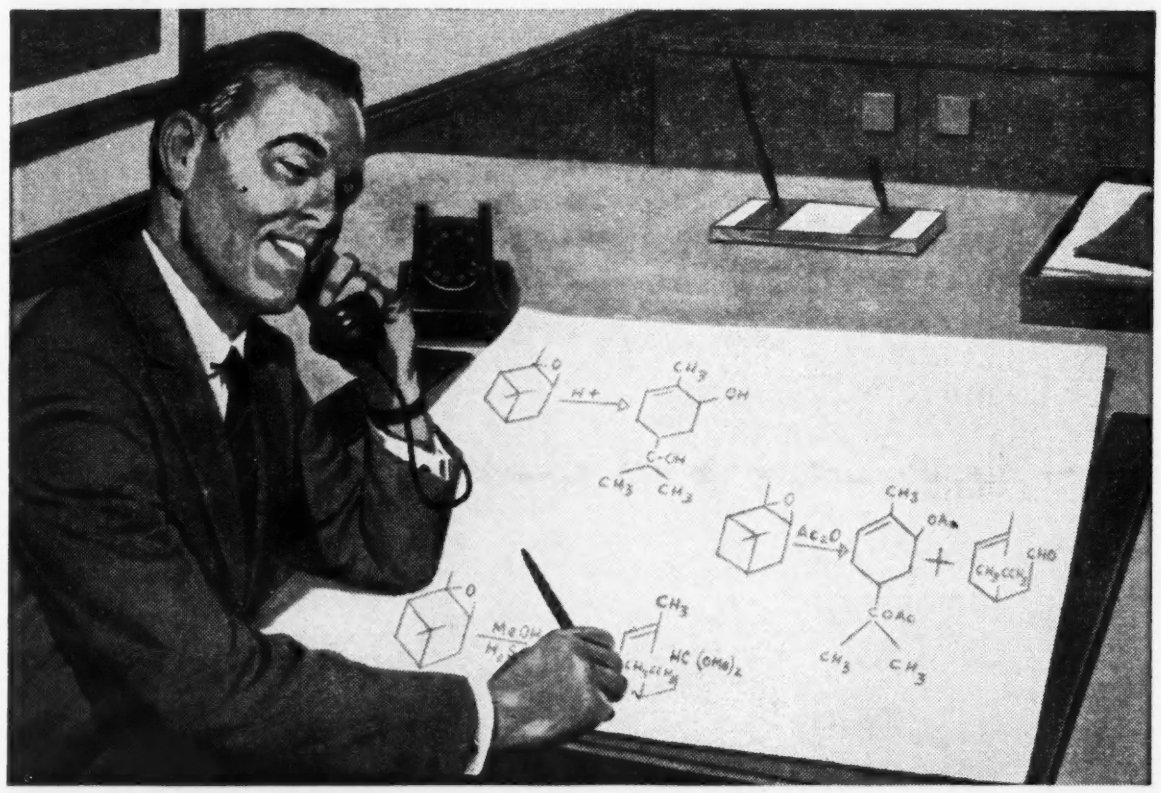
**Penola Oil Company** New York • Detroit • Chicago **Penola**

Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib. dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosphite, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, 66-68% b.p.l., bulk, c.l., mines, long-ton. 3.115 - —
68-70% b.p.l., bulk, c.l., same basis long-ton. 3.515 - —
70-72%, b.p.l., bulk, c.l., same basis long-ton. 6.165 - —
74-75%, b.p.l., c.l., bulk, same basis long-ton. 7.165 - —
76-77% b.p.l., c.l., bulk, same basis long-ton. 7.165 - —
Above Florida prices are based on fuel oil at $2.82 per bbl. and labor at $1.43.
Phosphoric acid, food grade, 75%, cbys. c.l., works, E. frt. equald. 100 lbs. 6.75 - —
cbys., l.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
cbys., l.c.l., works 100 lbs. 7.85 - 9.10
tanks, works 100 lbs. 5.75 - —
NF, 85%, cbys., c.l., works lb. .0825- —
cbys., l.c.l., works lb. .0850- .0875
tanks, works lb. .0640- —
Phosphorus, amorph., red, dms., t.l., works lb. .48 - —
dms., smaller lots, works lb. .49 - .50
Amorph., white (yellow), solid, dms., c.l., works, frt. equald. lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- —
Phosphorus pentoxide, dms., c.l., works lb. .1395- .1450
dms., l.c.l., works lb. .1695- .1750
Phosphorus sesquisulfide, tins, cs., c.l., works lb. .38 - —
tins, cs., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½- —
Phthalimide, 97-98%, dms., frt. equald lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. 3.45 - —
Resinated, bbls., same basis lb. 3.00 - —
Water dispersable, bbls., same basis lb. 1.69 - —
Phthalocyanine blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Ohama, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Phthalocyanine green toner, bbls., works lb. 3.95 - —
Resinated, bbls. lb. 3.50 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
NF lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43½
dms., l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline, 3°C, dms., c.l., works. lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., works lb. 2.00 - —
Picric acid, NF, bbls lb. .85 - —
Tech., bbls. lb. .44 - —
Pigment green B, kgs. lb. 1.35 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Pilocarpine nitrate, USP, bots., vials. oz. 4.65 - 4.75
Pimento, Jamaican, bgs. lb. .72 - —
Mexican, bgs. lb. .36 - —
Pimento berry oil, NF, dms. lb. 3.50 - —
Pimento leaf oil, cns. lb. 2.00 - 2.60
Pine oil, dest.-dist., dms., l.c.l., works lb. .12¼- —
dms., l.c.l., ex whse New York. lb. .14¼- —
Steam-dist., dms., ex whse, New York lb. .176 - —
dms., dlvd. lb. .179 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pinetar oil, coml., dms., c.l., works. lb. .0561- —
dms., l.c.l., works lb. .0634- —
dms., c.l., ex whse., New York. lb. .0745- —
tanks, works lb. .046 - —
Rectified, NF, dms. inclu., l.c.l., works, south. gal. 1.05 - —
dms. incl., l.c.l., ex whse., New York gal. 1.15 - —
Refd., dms. incl., l.c.l., works gal. .92 - —
dms. incl., l.c.l., ex whse., New York gal. 1.02 - —
Pink root, bls. lb. 2.50 - —
Piperazine, 95% or better, dms., c.l., minimum frt. alld. lb. 2.84 - —
dms., l.c.l., same basis lb. 2.88 - —
Piperazine citrate, 100-lb. lots lb. 2.00 - —
Piperazine hexahydrate, French Codex, bots., 100-lb. lots lb. 1.60 - —
Piperadine, dist., dms., frt. equald. lb. 2.60 - 2.70
Piperonyl butoxide, dms., dlvd. E.lb. 4.50 - 5.05
Piperonyl cyclonene, dms., dlvd. E.lb. 3.70 - 4.25

### Pitches

Pitch quotations, formerly grouped under one heading, are now listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works oz. 98.00 -101.00
Pleurisy root, bls. lb. .45 - .50
Podophyllum resin, NF, dms. lb. 15.60 -16.10
Poke root, bls. lb. .19 - .22
Pontianak copal gum, chips, bgs. lb. .26 - —
Nubs, bgs. lb. .37 - .40
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units, 1,000,000 units. .54 - —
bulk, bots., 1-25-billion units, 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
dms., 10,000-20,000-lb. lots, works. lb. .43 - —
dms., smaller lots, works lb. .46 - .48
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works. lb. .41 - —
dms., 10,000-20,000-lb. lots, works. lb. .43 - —
dms., smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs. lb. .24 - —
Dutch, bgs lb. .28 - —
Iranian, lb. .14½- .15
Polish, bgs lb. .27½- —
Turkish, bgs lb. .24 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis. 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
Reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.15 - —
dms., l.c.l., same basis. 100 lbs. 10.20 - —
Solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 - —
dms., l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF, dms. lbs. .31 - .36
Potassium bicarbonate, USP, gran., dms lb. .22 - —
USP, powd., dms lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, dom., gran. or powd., bbls. 5,000 lbs. 1 shipt lb. .40½- —
NF, dom., gran. or powd., dms., c.l. lb. .40 - —
smaller lots lb. .41 - .43
NF, imp., gran. or powd., kgs. lb. .33½- .37
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs. lb. .39 - .40
Potassium carbonate, NF, gran., bbls., dms. lb. .20 - —
NF, powd., bbls., dms lb. .21 - .22
Tech., calcined, bbls., c.l., works. 100 lbs. 9.00 - —
bbls., l.c.l., same basis. 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
bbls., l.c.l., works 100 lbs. 8.65 - —
Potassium chlorate, cryst., dms., c.l., works lb. .11¼- —
dms., l.c.l., works lb. .11½- .12½
Powd., dms., c.l., works lb. .11¾- —
dms., l.c.l., works lb. .12 - .13
NF, gran., 25-lb. metal dms lb. .36 - —
Potassium chloride, agricultural (see Potassium muriate).
Potassium chloride, indust., 99.9% KCl, bulk, c.l., works ton. 29.00 - —
bgs., c.l., works ton. 33.50 - —
99.3% KCl, bulk, c.l., works ton. 27.00 - —
bgs., c.l., works ton. 31.50 - —
USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd., dms lb. .24 - .26
Potassium chromate, tech., bgs lb. .50 - .50½
Potassium citrate, USP, gran., dms. lb. .43 - —
USP, powd., dms lb. .40½- .41½
Potassium cyanide, dms. 20,000-lb. lots or more works lb. .45 - —
dms., 2,000-19,999-lb. lots, works. lb. .455 - —
dms., smaller lots, works lb. .465 - —
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, bgs., ton lots lb. .23 - —
bgs., smaller lots lb. .23½- —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, dms. lb. 1.62 - —
Potassium guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash, caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33½- .38

# Heard the latest about Terpenes?

Becco has epoxidized them! More than five years of research on epoxidation have produced some interesting new products. Dipentene Monoxide and α-Pinene Oxide are now out of the laboratory and available, even in drum quantities.

Becco Dipentene Monoxide combines the reactivity of an epoxy group with that of an olefinic double bond in a cyclic terpene molecule. This compound undergoes the usual reactions of the epoxy group and the external double bond in a terpene molecule.

Becco α-Pinene Oxide combines the reactivity of an epoxy group with that of the bicyclic system of α-Pinene causing it to undergo some unusual reactions. It does not undergo the ring-opening reaction of an epoxide but rearranges in the presence of acid. In water solution, sobrerol is the main product; in anhydrous media, it is campholenic aldehyde.

These terpene oxides have many potential uses as intermediates in the manufacture of perfumes, flavors, pharmaceuticals, protective coatings, insecticides, bactericides, lubricant additives, adhesives, plasticizers, flotation agents, and in organic synthesis.

Typical properties of these epoxides are:

| | % Oxirane Oxygen | F.P. °C | B.P. °C | Density at 20°C | Solubility |
|---|---|---|---|---|---|
| Dipentene Monoxide | 8.9 | <—60 | 74-76 (10 mm) | 0.929 | Insoluble in water. Soluble in most of the common solvents. |
| α-Pinene Oxide | 9.4 | <—60 | 61-62 (10 mm) | 0.963 | |

Write Becco for experimental quantities and technical assistance in possible application for these compounds. Ask for Becco Bulletins Nos. 81 and 82.

**BECCO CHEMICAL DIVISION**
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

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*Progress in Peroxygens*® **BECCO**

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

**FMC CHEMICALS INCLUDE:** BECCO Peroxygen Chemicals • WESTVACO Phosphates, Barium and Magnesium Chemicals • WESTVACO Alkalis, Chlorinated Chemicals and Carbon Bisulfide • NIAGARA Insecticides, Fungicides and Industrial Sulphur • OHIO-APEX Plasticizers and Chemicals • FAIRFIELD Pesticide Compounds and Organic Chemicals

Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots....lb. 1.38 • —
Potassium iodide, dms. .....lb. 1.90 • 1.95
Potassium manure salt, 22% $K_2O$, bulk, c.l., works.....
unit-ton. .17 • .1765
Potassium metabisulfite, gran., dms. lb. .20 • .21
Powd., dms. .....lb. .25 • —
Potassium muriate, standard and gran., 59-63% $K_2O$, bulk, c.l., works, base price..
unit-ton. .36 • —
bulk, c.l., works, July forward
unit-ton. .38 • —
Gran., 60-63% $K_2O$, bgs., c.l., works, base price..ton.26.25 • —
bgs., c.l., works July forward
ton.27.45 • —
Potassium nitrate, NF, cryst., bbls., 20-ton lots..100 lbs.16.50 • —
bbls., smaller lots ...100 lbs.17.50 -18.00
NF, gran., bgs., 20-ton lots.
100 lbs. 9.25 • —
bgs., smaller lots.....100 lbs.10.50 -11.00
NF, powd., bgs., 20-ton lots
100 lbs.10.25 • —
bgs., smaller lots....100 lbs.11.50 - 12.00
Potassium oxalate, neutral, tech., fine gran., bbls., dms.
lb. .30 • .31
Potassium pentaborate, gran., bgs., c.l., works..ton.191.50 • —
dms., ton lots, ex whse..ton.302.00 • —
dms., smaller lots, ex whse..ton.307.00 • —
Powdered potassium pentaborate $10.25 per ton higher.
Potassium perchlorate, dms., c.l., works..lb. .18½- —
dms., l.c.l., works.....lb. .19 • .20
Potassium permanganate, coml. kgs., works..lb. .26 • .29
USP, dms., works.....lb. .29¼- .31
Potassium persulfate, dms., c.l., works..lb. .17½- —
dms., l.c.l., works.....lb. .18 • .21
Potassium pyrophosphate, tetrabasic, dms., works..lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate red (see Potassium ferricyanide).
Potassium silicate, electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 • —
dms., l.c.l., 5 dms. or more, works..100 lbs. 7.25 - 7.65
tanks, works.....100 lbs. 6.15 • —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 • —
dms., l.c.l., 5 dms. or more works..100 lbs. 7.20 - 7.60
tanks, works.....100 lbs. 6.10 • —
Glass, bgs., c.l., works..100 lbs.17.00 -17.30
bgs., l.c.l., works.....100 lbs.17.80 • —
Soln., clarif., 29° Be, 1:2.5, dms., c.l., works..100 lbs. 5.80 • —
dms., l.c.l., 5 dms. or more works..100 lbs. 6.55 - 6.95
tanks, works .....100 lbs. 5.45 • —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld. E lb. .776 • .848
Potassium sulfate, agricultural, 50% $K_2O$, bulk, works, base price..unit-ton. .64 • —
bulk, works, July forward.
unit-ton. .67 • —
NF VII, cryst., dms.....lb. .31 • .33
gran., dms. .....lb. .18½- —
powd., dms. .....lb. .16 • .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works..lb. .84 • .94
Tech., dms., works.....lb. .77 • .79
Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works.....lb. .16½- —
ctns., 1-ton lot or less, works..lb. .16¾- —
Potassium toluene sulfonate, dms., c.l. or t.l., works.....lb. .42 • —
dms., l.c.l., works.....lb. .46 • —
Potassium-magnesium sulfate, basis 40% $K_2SO_4$ and 18% MgO, bulk, works, base price ton.13.45- —
bulk, works, July forward..ton.14.00 • —
Potassium-sodium tartrate, NF, gran. or powd., dms., c.l..lb. .42½- —
dms., 5,000-lb. lots.....lb. .43 • —
dms., smaller lots .....lb. .43½- .49
Potassium-titanium fluoride, fib. dms., works lb. .39 • .40
Potassium-zirconium fluoride, fib. dms., c.l., works..lb. .50 • —
fib. dms., l.c.l., works.....lb. .52½- .55
Potato starch (see Starch, potato).
Pregnenolone, bots. .....gram. .45 • —
Pregnenolone acetate, bots. ..gram. .40 • —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld..lb. 2.83 • —
dms., 100-500 lb. lots.....lb. 2.95 • 3.15
Progesterone, USP, bots., 100 gram lots..gram. .50 • —
Progesterone acetate, bots..gram. .70 • —
Propane, indust., tanks, group 3. gal. .05 • —
tanks, New York harbor....gal. .093 • —
Propionic acid, syn., pure, dms., c.l., works..lb. .22¾- —
dms., l.c.l., works.....lb. .23¾- —
tanks, works .....lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¼- —
dms., l.c.l., dlvd. .....lb. .15¼- —
tanks, dlvd. .....lb. .11¾- —
n-Propyl alcohol, dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd.....lb. .14½- —
tanks, dlvd. .....lb. .11 • —
n-Propyl gallate, dms., 100 to 2,000-lb. lots works lb. 3.90 - 4.40
n-Propyl p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more..kilo.55.00 • —
bots., smaller lots .....kilo.55.10 -55.30
Propylene dichloride, consumers, dms., c.l., dlvd. E..lb. .0845- —
dms., l.c.l., same basis .....lb. .0950- —
tanks, same basis .....lb. .07 • —
Propylene dichloride prices in west 1c. higher dlvd. on same basis.
Propylene glycol, indust., dms., c.l., dlvd. E..lb. .16 • —
dms., l.c.l., same basis.....lb. .17 • —
tanks, same basis .....lb. .13½- —
USP, dms., c.l., dlvd E .....lb. .18 • —
dms., l.c.l., same basis.....lb. .19 • —
tanks, same basis .....lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd..lb. .20 • —
dms., l.c.l., same basis.....lb. .21 • —
tanks, same basis .....lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 • —
dms., l.c.l., dlvd. E.....lb. .19 • —
tanks, dlvd. E .....lb. .16½- —
Psyllium seed, black, bgs.....lb. .28 • .30
Blonde, bgs.....lb. .18 • —
Husks, bgs. .....lb. .40 • —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots..lb. .03⅜- .04¼
bgs., smaller lots .....lb. .03⅞- .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots..lb. .06½- —
fine, bgs., ton lots .....lb. .04 • —
sun dried, coarse, bgs.....ton.58.00 • —
fine, bgs.....ton. No Prices
Pumpkin seed, bgs.....lb. .25 • .26

Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works.lb. .45 • —
Powd., 1.3% pyrethrins, bbls., works..lb. .65 • —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works..gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works..gal.41.75 -42.75
Pyrethrum oleoresin, dewaxed, 20%, dms., works..lb.10.00 • —
Purif., 20% dms., works.....lb.10.00 -10.10
Pyridine, denat., dms., c.l., works and frt. equald..gal. 2.77 • —
dms., l.c.l., same basis.....gal. 2.80 • —
Refd., 2°, non-ret. dms., l.c.l., same basis..lb. .75 • —
Pyridoxine hydrochloride, bots., 100-gram lots..gram. .29½- —
Pyrites, Canadian, 48-50% S, works. long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls.....lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms.....lb. 3.50 • —
Pyroxylin scrap, shavings, amber, cs., works..lb. No stocks
Shavings, mixed colors, dms., works..lb. .11 • —
translucent colors, dms., works. lb. .16 • —
translucent pastels, cs., works. lb. .14 • —
white, China, ivory, dms., works. lb. .16 • —
white, dense, opaque, dms., works..lb. .12 • .15
Pyroxylin scrap, unground, amber, dms., works..lb. .20 • —
black, dms., works.....lb. .12 • —
mixed, mottled, dms., works..lb. .13 • —
USP, bots.....lb. 9.50 • —

## Q

Quassia chips .....lb. .17 • —
Quebracho extract, clarif., grd., 70% tannin, bgs., works....lb. .16½- .17
Clarif., liq., 35% tannin, bbls., works..lb. .08¼- .08½
Clarif., solid, 64% tannin, bgs., c.l., ex dock, duty extra. lb. .107429 —
ord., 63% tannin, bgs., c.l., same basis..lb. .098035 —
Quercitron extract, cryst., No. 1, bbls., l.c.l..lb. .40 • —
Liq., No. 1, bbls., l.c.l.....lb. .19 • —
Quicksilver (see Mercury metal).
Quince seed, bgs.....lb. 2.00 Nom.
Quinidine sulfate, USP, cns., 100-oz. lots..oz. .73 • .75
Quinine, NF, cns., 100-oz. lots..oz. .54 • —
Quinine bisulfate, USP, cns., 100-oz. lots..oz. .37½- —
Quinine hydrochloride, cns., 100-oz. lots..oz. .35 • .47½- —
Quinine sulfate, USP, cns., 100-oz. lots..oz. .27 • .33
Quinoline, dms., c.l., frt. equald..lb. .50¾- —
dms., l.c.l., same basis.....lb. .51¼- —
tanks, same basis.....lb. .50 • —

## R

R salt, paste, dms., frt. alld., 100% basis..lb. .88 • —
Powd., frt. alld. 100% basis....lb. .98 • —
Rapeseed oil, tanks .....lb. .18¾- —
Rauwolfia serpentina root, powd., bbls., dms..lb. 1.75 • —
Red, carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

***Red Pigments***

Red pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red, saunders, NF, powd., bbls..lb. .35 • .40
Reserpine, cryst., bots.....gram. 2.40 • —

From 2½-gallon pails to 55-gallon drums – including stainless – U.S. Steel offers the widest industrial container selection of all. Chances are there's a container here that's best for your needs. Your U.S. Steel representative will be glad to help you select the right one.

**Profit from all 5 of these U.S. Steel extras, too:**

- **Eye-catching containers**—your containers not only ship your product, but advertise it, too—when color-decorated by U. S. Steel.
- **Best rust protection**—there's more zinc phosphate on every USS rust-inhibited container.
- **Prompt container delivery**—a 7-point factory system gives you next-door service anywhere—any time.
- **Personalized container service**—your U. S. Steel salesman makes it his business to understand yours—to help you get the right containers for your needs.
- **Longer container life**—extra zinc phosphate gives your containers a safer, longer lifetime.

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**USS STEEL DRUMS**

UNITED STATES STEEL

Resorcinol, tech. grade, dms., c.l., works, frt. equald ... lb. .77½- —
dms., l.c.l., same basis ... lb. .78½- —
USP, cryst., dms., works ... lb. 2.75 - —
powd., dms., works ... lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 3.00 - 3.25
Rhatany root, bgs. ... lb. .15 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 5.80 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans ... lb. 32.00 -36.00
Rhubarb root, India, whole, bgs lb. .30 - —
powd., bbls. ... lb. .38 - —
Riboflavin, USP, bots., dlvd ... kilo. 65.00 - —
USP, readily soluble, bots., dlvd. kilo. 130.00 - —
Riboflavin 5'phosphate-sodium, bots., 100-kilo. lots or more. kilo. 125.00 - —
Rice bran oil, clarif., dms., l.c.l. lb. .18 Nom.
Clarif., tanks, dlvd. E ... lb. .15 - .15½
Rice starch (see Starch, rice).
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots oz. 70.00 - —
Rosemary oil, Spanish, NF, cns., dms lb. .70 - 1.00
Spanish, tech., cns., dms. ... lb. .50 - .70
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 - —
resin, 25-45%, fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis ... lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 ... gal. .13875- —
Rue oil, bots. ... lb. 2.00 - 2.50
Rutin, NF, fib. dms., 10 kilo lots. kilo. 17.00 - —
fib. dms., 5 kilo lots ... kilo. 17.50 - —
fib. dms., 1 kilo ... kilo. 18.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis ... lb. .24 - —

# S

S acid, bbls., works ... lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls. ... lb. .30 - .32
Powd., bbls. ... lb. .49 - .49½
Saccharin, calcium, fib. dms., 1,000-lb. lots, works ... lb. 2.50 - —
USP, cryst., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms., smaller lots ... lb. 1.70 - 1.80
USP, powd., soluble insoluble, dms., 1,000-lb. lots ... lb. 1.65 - —
dms., smaller lots ... lb. 1.75 - 1.95
Safflower oil, dms., New York lb. .1785- .1835
tanks, same basis ... lb. .1585- —
Saffron, Spanish, USP, tins ... lb. 45.00 - —
Safrol, dms. ... lb. .90 - 1.05
Sage, Cretan, bgs. ... lb. .11 - —
Dalmatian, bgs. ... lb. .44 - —
Italian ... lb. .26 Nom.
Sage oil, clary, bots ... lb. 35.00 - —
Dalmatian, cns. ... lb. 4.75 - —
Spanish, cns. ... lb. 1.20 - 1.45
Sago flour, raw, bgs. ... lb. .07 - .07¼
Refd., bgs. ... lb. .08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms. ... lb. 1.05 - 1.15
Salicylic acid, crude, fib. dms., c.l., frt. alld lb. .35 - —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
Sublimed, tech., fib. dms., c.l., dlvd lb. .37 - —
fib. dms., l.c.l., dlvd ... lb. .41 - —
USP, cryst., fib. dms. ... lb. .50 - —
powd., fib. dms. ... lb. .57 - —
Salol, NF, gran., bbls., kgs. ... lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l., 100 lbs. 1.07 - —
Table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.32 - —
Saltcake, dom., bulk, works, 100% $Na_2SO_4$ basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indian, chips bgs. .65 - .66
East Indian, powd., fib. dms. ... lb. .75 - .76
Sandalwood oil, cns. ... lb. 17.00 - —
Sardine oil, crude, tanks, Pac. coast. lb. .08½- .08¾
Sassafras oil, artif., dms. ... lb. .50 - .62
Nat., dom., dms. ... lb. 1.45 - 2.10
Sassafras oil, Brazilian (see Ocotea cymbarum oil).
Savin oil, cns ... lb. 2.75 - —
Savory oil, cns. ... lb. 4.25 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 - —
Powd., bgs., frt. alld., 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.50 -16.50
Sebacic acid, purif., dms., c.l., works lb. .64 - —
dms., l.c.l., works ... lb. .66 - .70
Seidlitz mixture, fib. dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots ... lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 12.00 - —
Senega root, bls. ... lb. 2.90 - 3.00
Senna leaves, Alexandria, whole and half, bls lb. .19 - —
siftings ... lb. .17 - —
pods, bls. ... lb. .14 - —
Tinnevelly, No. 1, bls. ... lb. .16 - .18
No. 2, bls. ... lb. .13 - .15
No. 3, bls. ... lb. .11 - .13
powd., bbls., bxs. ... lb. .15 - —
Serpentaria, root, bls. ... lb. 7.50 - —
Sesame oil, USP, dms. ... lb. .38 - .39
Sesame seed, Egyptian, hulled, bgs. lb. .22½- —
nat., bgs. ... lb. .17 - —
Nicaragua, hulled, shipt., -bgs., lb. .25 - —
nat., bgs. ... lb. .16½- —
Salvadorian, nat., bgs. ... lb. .21½- —
Indian, nat., bgs. ... lb. N.P.
Shellac, bleached, bonedry, bgs., 2,500-lb. lots lb. .50 - —
bbls., 1,500-lb. lots ... lb. .51 - —
kgs., 1,500-lb. lots ... lb. .52 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Shellac, refd., bgs., 1,500-lb. lots lb. .60 - —
bbls., 1,500-lb. lots ... lb. .61 - —
kgs., 1,500-lb. lots ... lb. .62 - —
Refd., lemon No. 1, bgs., 10-bg. lots lb. .39 - .41
lemon No. 2, bgs., 10-bg. lots lb. .37 - —
superfine, bgs., 10-bg. lots ... lb. .36 - —
TN, bgs., 10-bg. lots ... lb. .35 Nom.
Shellac in 1 to 10-bg. lots 1c. per lb. more.

Shingle stain oil, tar distillate, dms., c.l., works gal. .35 - —
dms., l.c.l., works ... gal. .44 - —
tanks, works ... gal. .23 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06¼- .17¼
paper bgs., l.c.l., works ... lb. .06½- .17½
Raw, paper bgs., c.l., works ... lb. .06¼- .16¼
paper bgs., l.c.l., works ... lb. .06½- .16½
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton. 25.00 - —
bgs., l.c.l., works, ex whse. ton. 45.00 -55.00
Hard-quartz, 99½%, 325 mesh, bgs., c.l., works ... ton. 20.00 - —
bgs., l.c.l., works ... ton. 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton. 15.00 - —
bgs., l.c.l., works ... ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works ... lb. .22 - .30½
tanks, works ... lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, fib. dms., 2,500-oz. lots oz. .87 - —
fib. dms., 1,000-oz. lots ... oz. .87⅜- —
fib. dms., 500-oz. lots ... oz. .87½- —
fib. dms., 100-oz. lots ... oz. .87¾- —
Silver nitrate, CP, cryst., bots., 2,500-oz. lots oz. .62⅜- —
bots., 1,000-oz. lots ... oz. .63½- —
bots., 500-oz. lots ... oz. .64⅛- —
bots., 250-oz. lots ... oz. .64⅝- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns ... lb. No stocks.
Soapbark, crushed, bls. ... lb. .45 - —
Powd., bls. ... lb. .45 - —
Whole, bls. ... lb. .38 - .40
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts 100 lbs. 3.00 - 4.77
bulk, c.l., works ... 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works ... 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.70 - —
Liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
73%, rayon type, sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
Solid, 76%, dms., c.l., works 100 lbs. 4.30 - —
Soda, sal, conc., bgs., c.l., works. 100 lbs. 2.50 - —
smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd. bgs., c.l., frt. equald lb. .13 - —
bgs., l.c.l., frt. equald ... lb. .13¾- —
NF, 60%, gran., dms., c.l., works lb. .14 - —
dms., l.c.l., works ... lb. .15½- —
Sodium alginate, NF, white powd., dms., 300 lbs. or more lb. .93 - —
Sodium p-aminobenzoate, dms., 1,000-lb. lots or more lb. 2.35 - —
dms., smaller lots ... lb. 2.45 - 2.55
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 2.70 - —
Sodium antimoniate, bbls., c.l., dlvd. E lb. .28 - —
bbls., l.c.l., dlvd. E ... lb. .29½- —
Sodium arsenate, 45% arsenic pentoxide, dms., c.l., works. lb. .12½- —
dms., l.c.l., works ... lb. .13¾- .14½
Sodium arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼- —
dms., l.c.l., works ... lb. .13 - .14½
Soln., dms., works ... gal. .59 - .67
Sodium ascorbate, dms., 25-50 kilo lots kilo. 12.00 - —
dms., 10-kilo lots ... kilo. 12.35 - —
dms., 5-kilo lots ... kilo. 12.75 - —
dms., 1-kilo lots ... kilo. 13.00 - —
bots., 500-gram lots ... gram. .0135- —
Sodium benzoate, tech., bbls., dms., 100-lb. lots or more lb. .39 - —
USP, bbls., dms., 100-lb. lots or more lb. .46 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works ... 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works. 100 lbs. 2.55 - —
bgs., l.c.l., works ... 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works ... lb. .13½- .14¾
Sodium bifluoride bbls., c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis ... lb. .1990- —
Sodium bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works ... 100 lbs. 5.40 - —
Soln., 35°, bbls., c.l., works, 100 lbs. 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax).
Sodium bromide, USP, bbls., works. lb. .40 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works ... 100 lbs. 3.50 - —
Sodium chlorate, cryst., dms., c.l., works lb. .09 - —
dms., l.c.l., works ... lb. .09½- .10½
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-ton lots or more works. lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l., works ... lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works ... lb. .14¾- —
fib. dms., l.c.l., works ... lb. .15¼- .16½
Tetrahydrate, bgs., c.l., t.l., works. lb. .1015- —
bgs., l.c.l. ... lb. .1065- .1190

Sodium citrate, anhyd., dms ... lb. .62 - —
NF VIII, gran., dms ... lb. .26½- .27½
USP, XIV, gran., dms ... lb. .29½- .30½
Sodium citrate, USP, powd. prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works ... lb. .90 - 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots ... lb. .193 - —
dms., over 1,000-lb. lots ... lb. .203 - —
dms., 100-lb. to 1,000-lb. lots. lb. .213 - —
Gran. sodium cyanide 1c. higher.
Sodium diacetate, 33-35% acidity, 250-lb. dms., works ... lb. .15 - —
250-lb. dms., l.c.l., works ... lb. .15¾- —
Anhyd., dms., c.l., works ... lb. .18 - —
dms., l.c.l., works ... lb. .18¾- —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs., smaller lots ... lb. .14 - —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1430- —
Sodium formate, bgs., c.l., works. 100 lbs. 7.60 - —
bgs., l.c.l., works ... 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., dms ... lb. .80 - .83
Tech., dms. ... lb. .35 - —
Sodium hydride, powd., dms., works. lb. 1.90 - 2.75
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite, dms., c.l., frt. alld lb. .24 - —
dms., l.c.l., frt. alld ... lb. .24½- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots. lb. .23½- .28
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb. lots ... lb. .97 - —
Sodium hyposulfite, anhyd., photo grade, bgs., c.l., works, 100 lbs. 8.05 - —
bgs., l.c.l., works ... 100 lbs. 8.45 - —
Anhyd., tech., bgs., c.l., works. 100 lbs. 7.25 - —
bgs., l.c.l., works lb 100 lbs. 7.65 - —
Hexahydrate, pea, cryst., bgs., c.l., works 100 lbs. 5.15 - —
bgs., l.c.l., works ... 100 lbs. 5.55 - —
photo grade, bgs., c.l., works. 100 lbs. 7.75 - —
bgs., l.c.l., works ... 100 lbs. 8.05 - —
Pentahydrate, tech., bgs., c.l., works 100 lbs. 5.15 - —
bgs., l.c.l., works ... 100 lbs. 5.55 - —
Sodium iodide, USP, bots., dms lb. 2.55 - —
Sodium lactate, edible, 60%, cbys., dms., works lb. .26½- —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd ... lb. .19½- .20¾
tanks, dlvd ... lb. .18 - —
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate, octahydrate, gran., bgs., c.l., works. ton. 87.00 - —
bgs., ton lots, ex whse ton. 143.00 - —
bgs., smaller lots, ex whse. ton. 148.00 - —
Tetrahydrate, dms., c.l., works. ton. 204.00 - —
dms., ton lots, ex whse ... ton. 242.50 - —
dms., smaller lots ex whse ton. 247.50 - —
Sodium, metallic, bricks, 14,000-lb. lots or more, works lb. .19½- —
Fused, 14,000-lb. lots or more, works lb. .19 - —
tanks, works ... lb. .17 - —
Sodium metanilate, bbls., frt. alld. lb. .62 - —
Sodium metasilicate, anhyd., bgs., c.l., works. 100 lbs. 5.70 - —
bgs., l.c.l., works ... 100 lbs. 6.15 - 8.10
dms., c.l., works ... 100 lbs. 6.20 - —
dms., l.c.l., works ... 100 lbs. 6.65 - 8.55
Sodium metasilicate, pentahydrate, bgs., c.l., works. 100 lbs. 4.45 - —
bgs., l.c.l., works ... 100 lbs. 4.85 - 6.75
dms., c.l., works ... 100 lbs. 4.95 - —
dms., l.c.l., works ... 100 lbs. 5.35 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .96
Cryst., dms., works, frt. alld. lb. .73 - .74
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate monohydrated).
Sodium naphthionate, bbls ... lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l., works. ton. 47.00 - —
bulk, c.l., works ... ton. 43.50 - —
Imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse. ton. 49.50 - —
bulk, c.l., same basis ... ton. 46.00 - —
Sodium nitrate, USP, bbls., c.l., works, frt. equald 100 lbs. 8.50 - —
bbls., l.c.l., same basis 100 lbs. 10.50 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works ... 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works ... 100 lbs. 7.60 - 7.90
Sodium oxalate, 88% bgs., works. 100 lbs. 10.85 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .26 - —
bgs., l.c.l., same basis ... lb. .27½- .34
Pellets, bgs., c.l., same basis lb. .26 - —
bgs., l.c.l., same basis ... lb. .27½- .34
Powd., bgs., dms., c.l., same basis. lb. .25 - —
bgs., dms., l.c.l., same basis lb. .26½- .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.
Sodium perborate, NF, tech., bgs., c.l., works lb. .19 - —
bgs., l.c.l., works ... lb. .21 - —
Sodium peroxide, dms., c.l., dlvd. E. of Miss. lb. .20 - —
dms., l.c.l., same basis ... lb. .20½- .21
Sodium phenolsulfonate, USP IX, gran., dms lb. .48 - .49
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 7.05 - —
bgs., l.c.l., works ... 100 lbs. 8.05 - 8.65
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., frt. equald 100 lbs. 8.10 - —
Dibasic, USP, dried powd. bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 - —
bgs., l.c.l., frt. equald 100 lbs. 9.10 - 9.70
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.60 - —
bgs., l.c.l., frt. equald 100 lbs. 9.05 - 9.65
Tribasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 - —
bgs., l.c.l., frt. equald 100 lbs. 4.80 - 5.40
Sodium phosphate in dms., 60c. to 80c. higher than bgs.

Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald. 100 lbs. 10.85 - —
bgs., l.c.l., works ... 100 lbs. 11.60 -11.85
Ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works ... lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½- —
bgs., l.c.l., frt. equald 100 lbs. 7.92½- 8.52½
Sodium salicylate, USP, dms ... lb. .78 - .80
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
bgs., l.c.l., dlvd. zone 1 ... 100 lbs. 4.10 - 4.35
bgs., l.c.l., dlvd. zone 2 ... 100 lbs. 4.35 - 4.60
bgs., l.c.l., dlvd. zone 3 ... 100 lbs. 4.75 - 4.90
bgs., l.c.l., dlvd. zone 4 ... 100 lbs. 5.35 - 5.60

Sales zones are: (1) Atl. states E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, hydrated, bgs., c.l., works. 100 lbs. 5.00 - —
bgs., l.c.l., works ... 100 lbs. 5.35 - —
dms., c.l., works ... 100 lbs. 5.50 - —
dms., l.c.l., works ... 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.55 - —
dms., l.c.l., works ... 100 lbs. 1.90 - 2.40
tanks, works ... 100 lbs. 1.20 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works ... 100 lbs. 2.95 - 3.10
tanks, works ... 100 lbs. 1.90 - —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works ... 100 lbs. 3.00 - 3.50
tanks, works ... 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ... ton. 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .075 - —
bgs., l.c.l., works ... lb. .079 - —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E lb. .633 - .692
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton. 52.00 - —
detergent, rayon grade, bgs., c.l., works ton. 34.00 - —
bulk, c.l., works ... ton. 31.00 - —
USP, cryst., fib. dms ... lb. .17½- .18
gran., fib. dms ... lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾- —
dms., l.c.l., works ... lb. .07¾- —
Liq., 40-44%, tanks, works, 100% basis ton. 120.00 - —
Sodium sulfide, flake, dms., c.l., works, E. frt. equald lb. .05½- —
dms., l.c.l., same basis ... lb. .06½- —
Fused, bbls., c.l., works, E., frt. equald lb. .05 - —
bbls., l.c.l., same basis ... lb. .06 - —
Sodium sulfite, anhyd., bgs., c.l. 100 lbs. 3.50 - —
bgs., t.l., same basis ... 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works lb. .04 - —
dms., l.c.l., works ... lb. .05 - —
Sodium thiocyanate, CP, dms. ... lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Sodium thiosulfate, tech. (see Sodium hyposulfite).
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works ... lb. .14½- —
ctns., 1-ton or less, works ... lb. .14¾- —
Sodium toluene sulfonate, dms., c.l. or t.l. lb. .38 - —
dms., l.c.l. ... lb. .42 - —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .37½- —
100-lb. dms., l.c.l., frt. adjusted, E lb. .39½- —
50-lb. dms., c.l., frt. alld. E lb. .38 - —
50-lb. dms., l.c.l., frt. adjusted, E lb. .40 - —
10-lb. cns., c.l., frt. alld. E lb. .44 - —
10-lb. cns., l.c.l., frt. adjusted, E lb. .46 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½- —
bgs., l.c.l., same basis ... 100 lbs. 8.27½- 8.87½
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
bgs., l.c.l., works ... 100 lbs. 9.40 - 9.80
dms., c.l., works ... 100 lbs. 9.05 - —
dms., l.c.l., works ... 100 lbs. 9.80 -10.20
Sodium tungstate, tech., kgs., dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis ... lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .35
Solvent naphtha, petroleum, partial aromatic, 205°-282° F. b.r., 41°C. m.a.p., tanks, New York, New Jersey ... gal. .215 - —
212°-278°F. b.r., 43°C. m.a.p., tanks, New Jersey ... gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., tanks, New Jersey ... gal. .29 - —
224°-280°F. b.r., 48°C. m.a.p., tanks, Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., tanks, New Jersey ... gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p., tanks, Houston gal. .25 - —
287°-386°F. b.r., 31°C. m.a.p., tanks, New Jersey ... gal. .29 - —
310°-314°F. b.r., 13.5°C. m.a.p., tanks, Texas City ... gal. .33 - —

Solvent naphtha, petroleum, partial aromatic, 310°-348°F. b.r., 17°C. m.a.p., tanks, New York, New Jersey gal. .35 - —
320°-360°F. b.r., 10°C. m.a.p., tanks, New York, New Jersey gal. .33 - —
324°-349°F. 37°C., m.a.p., tanks, Houston gal. .33 - —
341°-390°F. b.r., 35°C., m.a.p., tanks, New Jersey gal .27 - —
352°-413°F. b.r., 30°C., m.a.p., tanks, Houston gal. .33 - —
358°-401°F. b.r., 25°C., m.a.p., tanks, New York, New Jersey gal. .39 - —
364°-404°F. b.r., 19°C., m.a.p., tanks, New York, New Jersey gal. .425 - —
367°-418°F. b.r., 19.6°C., m.a.p., tanks, New York, New Jersey gal. .33 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .34 - —
fib. dms., smaller lots, works lb. .37 - .39
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., 1 to 5-ton lots, works lb. .38 - —
Soln., coml., aqueous, dms., c.l., works lb. .24¼ - —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼ - —
tanks, works lb. .23½ - —
Soln., NF, reg., 70% aqueous, dms., c.l., works lb. .16 - —
dms., ton lots, works lb. .16¾ - —
dms., smaller lots works lb. .17 - —
tanks, works lb. .15 - —
Soybean meal, 44% bulk, Decatur ton 45.00 - —
Soybean oil, crude, tanks, Decatur lb. .12¾ - —
Foots, soapstock, acid 95% tanks, N. Y. lb. .07 - —
Refd., alkali, dms lb. .17 - .17½
tanks lb. .15 - —
clarified, dms lb. .16¾ - .17
tanks lb. .14¾ - —
salad, dms. lb. .17⅝ - .17¾
tanks lb. .15⅝ - —
Soybean oil acids, dbl. dist., dms. lb. .18¾ - .20¾
tanks lb. .16¼ - —
Single-distilled, dms lb. .17¼ - .19¼
tanks lb. .15¼ - —
Soybean pitch, dms., works lb. .05 - .05¼
Soybean protein, chemically isolated, bgs., c.l., works lb. .23 - —
Mechanically refd., bgs., l.c.l., works lb. .066 - —
Sparteine sulfate, cns. oz. .80 - .90
Spearmint leaves, dom., bls oz. .75 - —
Spearmint oil, dms. lb. 4.25 - —
Sperm oil, bleached, winter, 45°, dms lb. .1825- .1850
tanks lb. .1650- —
Nat., winter, 45°, dms. lb. .1725- .1750
tanks lb. .1550- —
Spermaceti wax, blocks, cs lb. .31 - .34
Cakes, cs lb. .32 - .36
Spruce extract, liq., reg. tanks, works lb. .01¾ - —
Powd., super, bgs., c.l., works. lb. .05¼ - —
bgs., l.c.l., works lb. .05½ - —
Spruce oil, cns., dms lb. 2.80 - —
Squill, white, bls. lb. .16 - .18
White, powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .781 - .791
Stannic oxide, dms., dlvd. E lb. 1.04½ - 1.05½
Stannous chloride, anhyd., dms., works lb. .903 - 1.397
Hydrous, cryst., dms., works lb. .79 - .80
Stannous sulfate, dms., works lb. 1.038 - 1.058
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.32 - —
paper bgs., l.c.l. 100 lbs. 7.47 - —
Powd., paper bgs., c.l. 100 lbs. 7.44 - —
paper bgs., l.c.l. 100 lbs. 7.59 - —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Starch, potato, dom., Idaho, bgs., c.l., works lb. .06½ - —
Dom., Maine, bgs., c.l., works lb. .06¼ - —
ex whse, New York lb. .05¼ - .09¼
Starch, rice, bgs., l.c.l. lb. .15½ - .16
Starch, wheat, bgs. lb. .08½ - .09
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, dbl. pressed, bgs. lb. .15¼ - .17¼
Single pressed, bgs. lb. .14¼ - .16¾
Triple pressed, bgs. lb. .17½ - .19½
Stearine, oleo (see Oleostearine).
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania. gal. .16 - —
tanks, group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Chicago gal. .209 - —
Cleveland gal. .23½ - —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½ - —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs. lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .0850- .0875
Streptomycin sulfate, bulk gram. .0850- .0875
Strontium bromide, NF, 150-lb. fib. dms lb. .84 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works. lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, bbls., works. lb. .46 - —
Strontium iodide, jars, 25-lb. lots. lb. 3.40 - —
Strontium nitrate, bgs., c.l., works. 100 lbs. 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton 56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs. lb. 3.50 - 3.75
Styrax, USP, cs lb. .78 - .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½ - —
dms., l.c.l., same basis lb. .23½ - —
tanks, same basis lb. .20½ - —
Syn. rubber grade, 99%, dms., c.l., frt. alld. lb. .18½ - —
dms., l.c.l., same basis lb. .19½ - —
tanks, same basis lb. .16 - —
Styrolyl acetate, bots lb. 1.45 - 1.70

Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs., refy., E. lb. .0885- —
Sucrose octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —
Sugar (see Sucrose).
Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works lb. .65 - .75
80-lb. ctns., spot lb. .67¼ - .72¼
Sulfabenzamide, dms lb. 4.00 - 4.50
Sulfabenzamide-sodium, dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
USP, fib. dms lb. 5.00 - 5.20
Sulfacetamide-sodium, fib. dms lb. 5.00 - 5.20
USP, fib. dms lb. 5.20 - 5.40
Sulfadiazine, USP, microcrystals, dms lb. 10.60 -11.10
USP, powd., dms lb. 10.25 -10.75
Sulfadiazine-sodium, USP, dms lb. 11.25 -11.75
USP, microcrystals, dms lb. 11.60 -12.10
Sulfaguanidine, USP, dms lb. 2.50 - —
Sulfamerazine, USP, microcrystals. lb. 10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb. 11.25 -11.75
Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
Powd., dms lb. 8.50 - 9.00
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 - —
dms., l.c.l., l.t.l., works 100 lbs. 17.50 -18.50
Sulfanilamide, USP, 30-80 mesh., dms lb. 1.40 - 1.60
USP, microcrystals, dms lb. 1.70 - 1.90
powd., dms lb. 1.30 - 1.50
Sulfanilamide quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —

Sulfapyridine, NF, powd., bots., tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, NF, microcrystals, dms lb. 2.85 - 3.00
USP, powd., dms lb. 2.50 - 2.65
Sulfathiazole-sodium, NF, dms lb. 2.75 - 2.90
Sulfur, coml., flour, bgs., mines. 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.40 - —
Coml., lump, bgs., mines 100 lbs. 2.45 - —
bbls. mines 100 lbs. 3.00 - —
Crude, bulk, f.o.b. cars, mines. long-ton 26.50 - —
bulk, export, f.o.b. vessels Gulf ports long-ton 28.00 - —
bulk, dom. and Canada, f.o.b. vessels Gulf ports long-ton 28.00 - —
bulk, imp., Mexican, dark or blended, f.o.b. vessel, Coatzacoalcos long-ton 25.00 - —
Refd., flowers, NF, bgs., mines. 100 lbs. 4.75 - —
bbls., mines 100 lbs. 6.10 - —
Refd., flour, light, bgs., mines. 100 lbs. 4.35 - —
bbls., mines 100 lbs. 5.35 - —
lump, bgs., mines 100 lbs. 4.05 - —
rolls, bgs., mines 100 lbs. 4.60 - —
bbls., mines 100 lbs. 5.35 - —
salt block, bgs., mines 100 lbs. 4.25 - —
virgin block, bbls., mines. 100 lbs. 4.30 - —
Rubbermakers, coml., reg., bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.90 - —

Sulfur, rubbermakers, 98-100% passing through 325 mesh, bgs., 100 lbs. 2.75 - —
bbls., mines. 100 lbs. 4.00 - —
Rubbermakers, refd., bgs., mines. 100 lbs. 4.00 - —
bbls., mines 100 lbs. 5.15 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.95 - —
bbls., mines 100 lbs. 4.20 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .04½ - —
ret. dms., l.c.l., same basis lb. .05¼ - —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Refrigeration, 150-lb. cyls., dlvd. lb. .30 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½ - —
55-gal. non-ret. dms., l.c.l., same basis lb. .05¼ - —
tanks, same basis lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton 22.35 - —
93%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —


TENNESSEE CORPORATION

COPPER

COPPER SULFATE
Industrial Crystals and all common grades.

MONOHYDRATED COPPER SULFATE
35% Copper as metallic packaged in steel drums at no extra cost.

COPPER CARBONATE
55% Copper as metallic. Light and dense grades.

CUPRIC CHLORIDE
37% Copper as metallic. Available in poly-lined drums or bags.

CUPRIC OXIDE
Minimum 76% Copper as metallic. Technical grade . . . NOT A BY-PRODUCT.

SULFUR

SULFURIC ACID

LIQUID SULFUR DIOXIDE
Highest commercial quality, available in tank cars, tank wagons, ton cylinders and 150-lb. cylinders.

CHLOROSULFONIC ACID
Iron less than 1.0 ppm as loaded. Water white. Delivered in glass-lined tank wagons, also in stainless steel drums.

SODIUM HYDROSULFITE
T-C HYDRO is a dry, white, free flowing, crystalline powder of uniform particle size and structure. It is dust free, assuring highest stability and uniformity.

PARA TOULENE SULFONIC ACID, ANHYDROUS
Other organic Sulfonic Acids.

INDUSTRIAL CHEMICALS

We mine Copper, Sulfur, Iron and Zinc and are basic producers of their chemical derivatives. Our technical know-how and basic position in these minerals is your assurance of exacting quality control, strict uniform consistency and a plentiful supply.

ZINC

MONOHYDRATED ZINC SULFATE
36% Zinc as metallic. White, free flowing powder.

ZINC OXIDE
Secondary Zinc Oxide.

IRON

FERRIC IRON SULFATE
Partially hydrated, free flowing granular form. Available in bags or bulk.

MANGANESE

MANGANESE SULFATE
65% Mn $SO_4$. Designed specifically for inclusion in mixed fertilizer.

MONOHYDRATED MANGANESE SULFATE
93% Mn $SO_4$, $H_2O$. Highest purity, technical grade . . . NOT A BY-PRODUCT.

MANGANOUS OXIDE
Minimum 48% Manganese as metallic. Feeds, fertilizers, spray or dust grades.

*Samples, specifications and detailed information upon request.*

TENNESSEE CORPORATION

617-629 Grant Building, Atlanta, Ga.

## Sulfuric Acid—Toluene

Sulfuric acid, CP, NF, consumers' cbys, c.l., frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots. extra, cs., l.c.l., same basis lb. .18¼- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works ton.29.00 - —
65%, tanks, works ton.39.50 - —
Sumac leaves, 28% tannin, bgs., ex dock ton.135.00 Nom.
28% tannin, grd., bgs., ex dock ton.130.00 Nom.
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .98 - —
Sweet birch oil, USP, northern, cns lb. 4.25 - 9.50
USP, southern, cns. lb. 2.30 - 2.75

### T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, New York, grd., bgs., c.l., works ton.28.00 - —
bgs., l.c.l., works ton.31.00 -36.00
Dom., fibrous, New York, 99.5%, 325 mesh, bgs., c.l., works. ton.31.00 - —
bgs., l.c.l., works ton.34.00 - —
99.95% micronized, bgs., works. ton.38.00 - —
ord., Calif., grd., bgs., c.l., works ton.33.00 -39.50
ord., Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04½- .03
tanks, works lb. .02½- .03
Dist., dms., c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .05½- —
Refd., dms., c.l., works lb. .06¾- —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06
Tall oil acids, dms., c.l., works lb. .09¼- .10¼
tanks, works lb. .07½- .08½
Tall pitch, dms., c.l., works ton.50.00 -70.00
tanks, works ton.30.00 -40.00
Tallow, edible, tanks, dlvd lb. .11¾- —
Inedible, fancy, bleachable, tanks, dlvd lb. .07⅝- .07¾
fancy, bleachable, guaranteed, dms., f.a.s.lb. .09¼- —
No. 1 tanks, dlvd lb. .06⅞- —
prime, tanks, dlvd lb. .07⅜- .07½
special tanks, dlvd lb. .07 - —
sulfonated, 25%, bbls., l.c.l. lb. .08⅜- .08⅞
50%, bbls., l.c.l. lb. .09⅜- .10⅛
Tallow acids, dist., dms. lb. .15¼- .17¼
tanks lb. .13¼- —
Hydrogenated, dms. lb. 14¼- .16¼
Tallow oil, acidless, dms., c.l. lb. .14½- —
dms., l.c.l. lb. .15½- .17
Tangerine oil, Floridian, dms. lb. 2.00 - 2.80
Tankage, animal, feeding, 9-11% ammonia, bulk, unit-ton. 5.00 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton. 6.00 - —
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.10
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 2.01
Tech., dms. lb. 1.05 - —
Tansy oil, dms. lb. 7.50 - 8.40
Tapioca flour, Brazilian, bgs., ex whse lb. .12½- .13½
Siamese, AAA, same basis lb. .08 - .09
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
dms., l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis, gal. .54 - .56
dms., l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l., same basis gal. .70 - .72½
dms., l.c.l., same basis gal. .73½- .74½
tanks, same basis gal. .62½- —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, dom., USP, 230 or 250-lb. dms., c.l lb. .49 - —
230 or 250-lb. dms., 10,000-lb. lots, 1 shipt lb. .49½- —
230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb. dms. lb. .51 - —
Imp., bgs. lb. .42 - .45
Terpene glycol ether, dms., c.l., works lb. .23½- —
dms., l.c.l., works lb. .25½- —
tanks, works lb. .22 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, dms., l.c.l., dlvd. E lb. .23¾- —
Extra, dms. lb. .41 - .60
Prime, dms. lb. .30 - .45
Terpinyl acetate, extra, cns., dms.lb. .60 - .75
Prime, dms. lb. .55 - .70
Terpinyl propionate, dms. lb. 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, 100-gm. lots, bots. gram. .70 - —
Testosterone, USP, 100-gram lots, gram lots, bots. gram. .68 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., works lb. .20½- .21½
smaller dms., works lb. .23½- .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½- —
dms., l.c.l., dlvd. E lb. .62½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
dms., l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .37 - —
dms., l.c.l., l.t.l., Memphis, Tenn. lb. .38 - —
dms., l.c.l., l.t.l., Newark N. J. lb. .40 - —
tanks, dlvd., E. of Denver lb. .365 - —
tanks, dlvd. W. of Denver lb. .375 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd. lb.12.50 -15.00
Thallium sulfate, 99%, bots. dlvd lb. 8.00 -13.00
Theobromine, NF, fib. dms lb. 4.50 - —
Theobromine and sodium acetate, USP, fib. dms lb. 4.75 - —
Theobromine sodio-salicylate, NF, fib. dms lb. 3.90 - —
Theophylline, anhyd., or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, reg., fib. dms kilo.60.00 - —
USP, ampule grade, fib. dms kilo.62.00 - —
Thiamine mononitrate, USP, fib. dms kilo.62.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.10 - —
Tungstated, PTMA, kgs., works. lb. 6.40 - —
Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb, lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .33 - —
bgs., l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more. works lb. 3.50 - —
dl-Threonine, bots., 1-kilo. lots.kilo.450.00 -500.00
Thyme oil, NF, red., cns., dms lb. 1.45 - 1.75
white, cns. lb. 1.70 - 2.00
Tech., white, cns lb. .40 - 1.85
Thymol, fib. dms lb. 2.60 - 3.00
Thymol iodide, NF, dms. lb. 7.30 - —
Timbo root, (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. .98¾- —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, chalk-resistant, bgs., c.l., dlvd.lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
Anatase, ceramic, bgs., c.l., dlvd. lb . .23½- —
bgs., l.c.l., dlvd lb. .24½- —
reg., bgs., c.l., dlvd lb. .23½- —
bgs., l.c.l., dlvd. lb. .24½- —
Metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton.120.00 - —
bgs., c.l., Niagara Falls, N. Y ton.137.50 - —
bgs., 5 ton lots, same basis. ton.142.50 - —
bgs., ton lots, same basis. ton.147.50 - —
Rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium pigment, calcium-rutile base, reg., bgs., c.l., dlvd. lb. .09¼- —
bgs., l.c.l., works lb. .09¾- —
Calcium-rutile base, high-tinting, dms., c.l lb. .09 - —
dms., l.c.l lb. .09½- —
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, bbls., frt. alld lb. .81 - —
d-a-Tocopherol, NF, conc., pure basis kilo.91.00 - —
d-a-Tocopherol acetate, NF, conc., pure basis kilo.166.00 - —
d-a-Tocopherol acid, succinate, cryst. kilo.148.00 - —
dl-a-Tocopherol, bots kilo.134.20 - —
dl-a-Tocopherol acetate, bots kilo.122.00 - —
25% dry, powd., bots kilo.30.50 -32.00
o-Tolidine base, dry, kgs., 100% basis lb. 1.40 - —
Paste, kgs., 100% basis lb. 1.35 - —

***Toluol***

Toluol quotations, both coaltar and petroleum, may now be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.35 - —
Tolu balsam, cns lb. 4.50 - 5.25
Toluene, coaltar, indust. or nitration tanks, works:—
Bethlehem, Pa gal. .32 - —
Birmingham, dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland, dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y gal. .32 - —
Lone Star, Tex gal. .33 - —


# INTERMEDIATES for... ORGANIC SYNTHESIS

**VERSATILE, SPECIALLY PREPARED INTERMEDIATES** to permit the introduction of required radicals. Those listed below are being produced in commercial quantities. If you require a special purpose intermediate our research department will work with you. Write today for information on any of these intermediates, or for details on our research activities with intermediates.

**β-Diethylaminoethyl Chloride Hydrochloride (DEC)** A granular, tan-colored solid. Nonvolatile, hygroscopic and very soluble in water. For use as a pharmaceutical intermediate, especially in the manufacture of anti-spasmodic agents.

**γ-Diethylaminopropyl Chloride Hydrochloride (DEPC)** A light tan-colored crystalline solid. Very hygroscopic, and very soluble in water and in most low molecular weight alcohols. Insoluble in nonpolar solvents. For use as an intermediate for introduction of the diethylaminopropyl chain.

**β-Diisopropylaminoethyl Chloride Hydrochloride (DIC)** A light buff to white crystalline solid. Somewhat hygroscopic, soluble in water, alcohols and organic acids, but insoluble in nonpolar solvents. For use in organic synthesis.

**β-Dimethylaminoethyl Chloride Hydrochloride (DMC)** A granular, tan-colored solid. Nonvolatile, hygroscopic, very soluble in water. For use in the manufacture of antihistaminics and other pharmaceuticals, and for organic synthesis.

**β-Dimethylaminoisopropyl Chloride Hydrochloride (DMIC)** A granular, tan-colored solid. It is nonvolatile and hygroscopic. For use in the manufacture of analgesics and other pharmaceuticals and other potential uses in organic synthesis.

**γ-Dimethylaminopropyl Chloride Hydrochloride (DMPC)** A white crystalline solid. Essentially nonvolatile, hygroscopic and soluble in water. Used for pharmaceutical and organic synthesis. Available exclusively from Michigan Chemical.

**p-Bromochlorobenzene** An almost white crystalline solid with a characteristic aromatic odor. Slightly soluble in cold, but very soluble in hot ethyl alcohol. For use in organic synthesis, as a pharmaceutical intermediate and in synthesis of insecticides.

**Trimethylene Chlorobromide** A colorless, clear liquid with a sweet odor. For use as an intermediate in manufacture of cyclopropane and other pharmaceuticals. The greater reactivity of the bromine atom makes it specially useful in preparation of gamma-chloropropyl compounds.

**Hydrobromic Acid** A clear, amber colored, fuming liquid with a strong pungent odor. For use as an organic intermediate, and useful for the manufacture of dyes, drugs, perfumes and photographic chemicals. Available in 48% and 62% concentrations.

**Ethyl Bromide** A clear, odorless, volatile liquid with a pleasant odor and a sweet taste. For use in organic synthesis, as a pharmaceutical intermediate, as an ethylating agent, a volatile solvent and in the manufacture of dyes, perfumes and anaesthetics.

**Phosphorus Tribromide** A colorless or slightly yellowish, clear liquid with a sharp odor. Fumes on exposure to air, reacts violently with water. Used as a brominating agent, especially for alcohols without rearrangement, as a catalyst and as analytical reagent.

**Monobromobenzene** A clear, colorless, heavy liquid with a sweet aromatic odor. Practically insoluble in water but soluble in alcohol or ether. Used as a pharmaceutical intermediate.

**Tetrabromophthalic Anhydride** A pale yellow crystalline solid containing 68.9% bromine. An intermediate for the manufacture of fire-retardant resins, plastics, waxes and paints. Reacts with alcohols to form the corresponding half esters.

**1,3-Dibromo-5,5-Dimethylhydantoin** A pale yellow fine powder with a pungent odor similar to bromine. An effective and economical reagent for controlled brominations of aromatic and unsaturated aliphatic compounds, especially in the allyl position.

Other widely used intermediates produced by Michigan Chemical Corporation include Bromine, Cyclopentyl Bromide, Chlorobromomethane, Methyl Bromide and Methylene Bromide.

MC* ©

**MICHIGAN CHEMICAL CORPORATION**

**543 Bankson Street Saint Louis, Michigan**

MC* (c)
C-57-1
*Trademark

Toluene, coaltar, indust. or nitration, tanks, works:—
Lorain, Ohio ..... gal. .32 - —
Middletown, Ohio ..... gal. .33½- —
Minnequa, Colo ..... gal. .32 - —
Philadelphia dist ..... gal. .32 - —
Pittsburgh dist ..... gal. .32 - —
Sparrow's Point, Md ..... gal. .32 - —
Terre Haute, Ind ..... gal. .34 - —
Youngstown, Ohio ..... gal. .32 - —
Petroleum, indust., 2°, tanks, works:—
Albany, N. Y ..... gal. .35 - —
Bayonne, N. J ..... gal. .34 - .35½
Baytown, Tex ..... gal. .33 - .35½
Chicago, Ill ..... gal. .35 - .35½
Detroit, Mich ..... gal. .35 - —
Houston, Tex ..... gal. .33 - —
Philadelphia, Pa ..... gal. .34 - —
Providence, R. I ..... gal. .35 - .35½
Wood River, Ill ..... gal. .34 - —
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
p-Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works ..... lb. .18 - —
p-Toluenesulfonic acid, monohydrate, dms., c.l., or t.l. lb. .90 - —
dms., 125 lbs. to t.l ..... lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis ..... lb. .80 - —
tanks, same basis ..... lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
dms., l.c.l., same basis ..... lb. .24 - —
tanks, same basis ..... lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
Solid, dms., frt. alld ..... lb. .60 - .61
o-Toluidine-m-sulfonic acid, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic acid, bbls., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works .... lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld lb. .97 - —
fib. dms., l.c.l., frt. alld .... lb. 1.00 - —
Powd., fib. dms., same basis ... lb. 1.00 - —
Tonka beans, Angostura, cks .... lb. No prices.
Brazilian, Surinam, cs ..... lb. 1.35 - —
Totaquine 100-oz. lots, cns ..... oz. .42 - —
Toxaphene, dms., c.l., t.l., works lb. .22 - —
dms., l.c.l., l.t.l., works ..... lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs. lb. 4.50 - 4.70
No. 2, cs. ..... lb. 3.50 - 3.75
No. 3, cs. ..... lb. 3.25 - 3.40
USP, powd., bbls. ..... lb. 1.25 - 1.38
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis ..... lb. .40 - —
tanks, same basis ..... lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42½- —
non-ret. dms., l.c.l., frt. alld E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver .. lb. .40 - —
Tributyl phosphate, dms., c.l., works lb. .52½- —
dms., l.c.l., same basis ..... lb. .53½- —
tanks, same basis ..... lb. .50 - —
Tributylamine, dms., c.l., works .. lb. .67½- —
dms., l.c.l., same basis ..... lb. .68½- —
tanks, same basis ..... lb. .65 - —
Trichloroacetic acid, bots ..... lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .14½- —
dms., l.c.l., frt. alld. E. ..... lb. .15½- —
tanks, frt. alld. E. ..... lb. .13 - —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., works lb. .14¾- —
dms., l.c.l., works. ..... lb. .17¾- —
tanks, works ..... lb. .13¾- .14¼
Trichloroethylene, dms., c.l., or t.l., works, frt. equald .. lb. .13 - —
dms, l.c.l., dlvd. E. ..... lb. .15¼- —
tanks, works, frt. equald ..... lb. .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate 65% soln. ret. cbys. works. frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. ..... lb. .36 - —
tanks, dlvd. ..... lb. .32½- —
Petroleum, dms., c.l., dlvd .. lb. .34½- —
dms., l.c.l., dlvd. ..... lb. .35½- —
tanks, dlvd. ..... lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., dlvd. lb. .26½- —
dms., l.c.l., dlvd. ..... lb. .27½- —
tanks, dlvd. ..... lb. .24 - —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., l.c.l., same basis ..... lb. .25½- —
tanks, same basis ..... lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .49 - —
tanks same basis. ..... lb. .46½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .45¾- —
non ret. dms., l.c.l. frt. alld. E. of Denver lb. .46¾- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. ..... lb. .41½- —
tanks, dlvd. ..... lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. ..... lb. .22 - —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E. ..... lb. .52½- —
tanks, dlvd. E. ..... lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E. ..... lb. .24¼- —
tanks, dlvd. E. ..... lb. .20¾- —
Trimethylamine, 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .35 - —
dms., l.c.l., works, frt. equald, 100% basis lb. .35½- —
tanks, works, frt. equald, 100% basis lb. .26 - —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 - —
dms., l.c.l., works ..... lb. .51½- —
Tripentaerythritol, bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 - —
bbls., l.c.l., frt. equald lb. .41 - —
Triphenylguanidine, bbls., works lb. .90 - —
tanks, same basis ..... lb. .18½- —
Tripropylene glycol, dms., c.l., frt. alld. E lb. .20½- —
dms., l.c.l., frt. alld. E ..... lb. .21½- —
Tripropylene glycol prices 1c. per lb. higher in West.
Tripropylene phosphate (see Sodium phosphate tribasic).
Tyrothricin, USP, bots ..... grams. .55 - .58
dl-Tryptophane, fib. ctns., works. kilo. 75.00 - —
Tung oil, dms., c.l., New York lb. .23¾- —
dms., l.c.l., same basis ..... lb. .24¼- .24½
tanks, New York ..... lb. .22¼- —
tanks, dom. mills ..... lb. .22 Nom.
Tungsten metal powd., 2-5 microns, dms., works lb. 4.00 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
dms., smaller lots, works ... lb. 3.15 - 3.50
Tuscan red, bbls., frt. equald .... lb. .26 - .32
Turkey red, bbls., works ..... lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms .... lb. .28 - .45

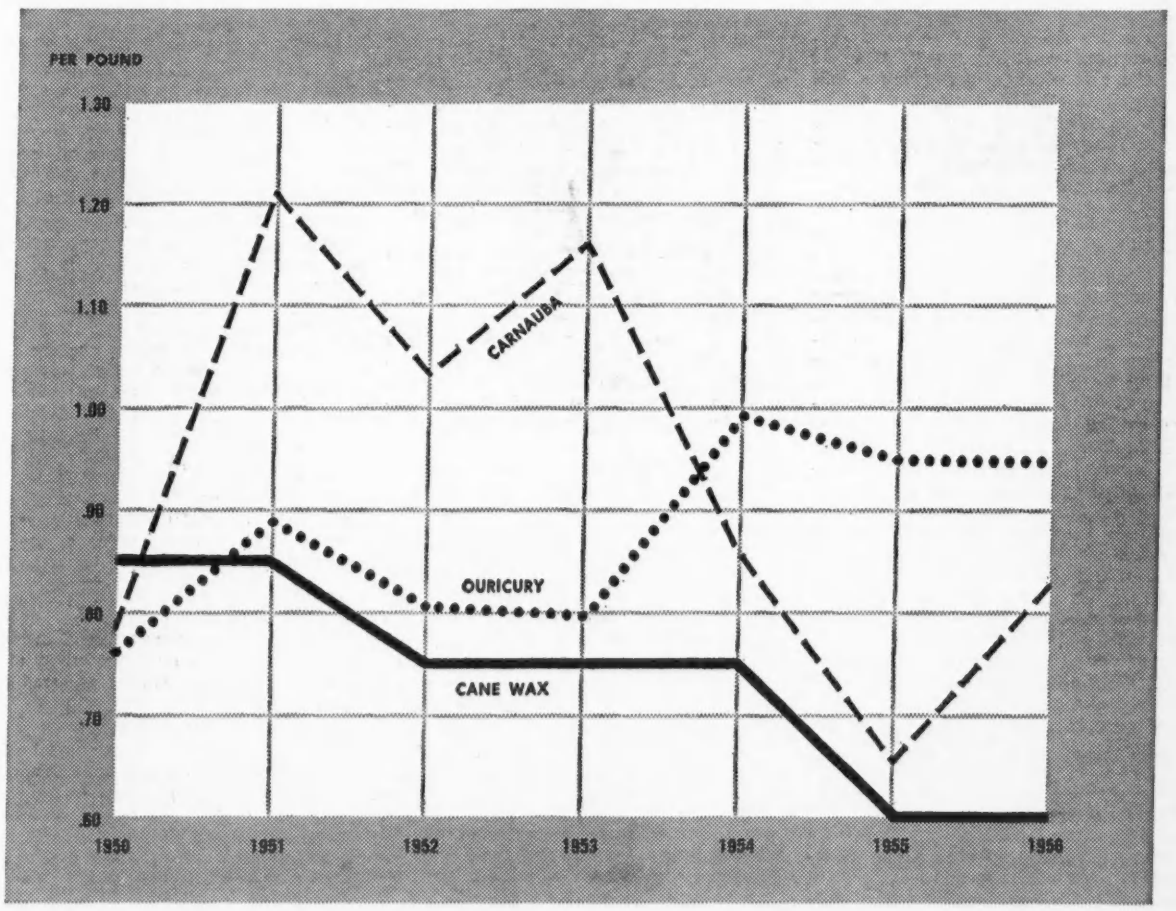
## U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. N. of Tenn., and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .35 - .39½
Jobbing types, bbls., same basis. lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue dlvd. prices ½c. higher Ala., Fla., Ga., La., (Shreveport 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Umber pigment, burnt, American, bgs., c.l., works lb. .07 - .07¾
bgs., l.c.l., works ..... lb. .07¼- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y .... lb. .07¾- —
Raw, American, bgs., works ... lb. .07½- .08¼
Turkey-type, bgs., works .... lb. .06¾- .07
Undecylenic acid, dms. ..... lb. 1.45 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E. ton. 125.00 - —
bgs., l.c.l., dlvd. E., ex whse. ton. 145.00 - —
45% N, agricultural, bgs., c.l., (30 tons), dlvd. E. ton. 110.00 - —
Urea-ammonia liquor, A and B grades, N basis, tanks, Belle, W. Va. ton. 126.00 - —
C grade, tanks, same basis ... ton. 124.50 - —
37 grade, tanks, same basis ... ton. 153.00 - —
Urethane, USP, dms. ..... lb. 1.45 - —
Uva-ursi leaves, bls. ..... lb. .12 - .14

## V

Valerian root, Belgian, bgs ..... lb. .35 - —
Indian, bgs. ..... lb. .27 - —
dl-Valine, dms., works ..... lb. 21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton. No prices.
Valonia cups, 28-30% tannin, bgs., ex dockton. No prices.
Valonia extract, powd., 63% tannin, bgs., ex dock, duty extra. lb. No prices.
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vandyke brown, bbls., works .... lb. .09½- .12
Vanilla beans, Bourbon, tins ... lb. 8.75 - 9.00
Mexican, cuts, tins ..... lb. 7.50 - 7.75
whole, tins ..... lb. 8.25 - 8.50
Tahiti, cs. ..... lb. 7.00 - —
Vanillin, ex eugenol, tins, 25-lb. lots lb. 6.50 - 6.75
tins, smaller lots ..... lb. 6.90 - 7.25
Ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more lb. 2.85 - —
100-lb. fib. dms., smaller lots. lb. 2.95 - 3.10
Venetian red, jobbing, bgs., works. lb. .0475- —
20%, bgs., works ..... lb. .0525- —
25%, bgs., works ..... lb. .0575- —
30%, bgs., works ..... lb. .06 - —
35%, bgs., works ..... lb. .0625- —
40%, bgs., works ..... lb. .0675- —
Vetiver oil, Bourbon, cns. ..... lb. 11.75 -11.90
Haitian, cs. ..... lb. 9.25 -10.00
Java, cns. ..... lb. 18.50 -20.00
Victoria blue toner, moylbdated, PMA, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.50 - —
Tungstated, PTMA, bbls. ..... lb. 5.55 - —
Victoria blue toner, dld., prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.

—Continued on page 67


# The Truth About Wax Prices!

The chart gives you a clear picture of the steady, dependable price structure of Cane Wax compared to the wide fluctuation of Carnauba and Ouricury which can create such serious buying problems. And that's not all, the world's largest group of wax scientists has recently developed cane waxes that offer users completely new opportunities for economy and standards of quality in their products. WARWICK WAX COMPANY offers you complete technical information and expert laboratory assistance in implementing these new waxes in your formulations.

**CANE WAX—**

1. **THE ONLY VEGETABLE WAX** not subject to severe price fluctuation.
2. **THE ONLY VEGETABLE WAX** always free of adulteration.
3. **THE ONLY VEGETABLE WAX** produced with laboratory controlled uniformity.
4. **THE ONLY VEGETABLE WAX** produced domestically.
5. **THE ONLY VEGETABLE WAX** available for same day or overnight delivery no matter where you are.

*FOR FURTHER INFORMATION, SAMPLES AND DATA, WRITE . . .*

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# Oil, Paint and Drug Reporter

Founded October 18 1871, by William O. Allison
Directed 1900-1942 by Harry J Schnell
Incorporating Drug Paint and Oil Trade, The New York Drug Bulletin, The Weekly Drug News New York Druggists' Price Current, The Soap Makers Journal, Oil and Paint Review, and International Petroleum Reporter.
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## What the Schools Need

Of course, he was addressing a group of educators. But, the declaration of President Eisenhower in connection with the centennial of the National Education Association that federal governmental aid for schools was more imperative than that in the direction of armament modernization was firmly rooted in his belief. On the same day, a subcommittee of the lower house of congress approved a compromise bill for school aid to the amount of $400,000,000 a year over a term of five years. The idea of federal aid for education, at least in the providing of facilities, appears to have a more favorable legislative status than it had last year.

Perhaps it is because of the more promising outlook for federal aid that the voters in local communities which are badly in need of more classrcoms are not looking favorably upon proposals for their financing of the requirements. There is evidence of a growing feeling that the job should be left to Washington. There is concomitant evidence of a quite general belief that, because the people of one community will be required to pay in federal taxes to provide school aid in distant sections of the country, they should let the taxpayers in other communities at least help to meet their needs to a similar extent.

One of the most important and imperative aspects of the needs in educational directions is beginning to get some of the attention which it deserves —yes, demands. That is the need for better teachers, better by the criterions of former years when the practitioners of teaching looked upon their calling as a profession, not, as they largely do now, as a kind of unionized labor.

There are some indications that that need is getting public recognition, and is being helpfully considered by business. Several offers have recently been reported, one especially from a prominent member of the chemical industry, for the providing of opportunities in scholarships and otherwise for the better qualifying of teachers, not only, as is now disturbingly evident, as instructors, but as real teachers in the full sense of the term—as advisers, counselors, leaders in all that is essential to the proper educating, not merely the somehow necessary training, of the young.

The instilling of such qualifications—and a purpose to exercise them intelligently in practice and precept—in those who would serve the educational needs of the nation is a far from simple or easy task. There is all too little evidence in the way of results to determine the extent to which that task is even undertaken in the schooling of teachers. Some day, the educational division of the Department of Health, Education, and Welfare may be able and willing to undertake explorations in that and other equally important problems in its field, along the lines of the Public Health Service. In education, as in all other fields of human needs, the prime necessity for the turning out of a good product is for a good operator. The material and the equipment with which he has to work are also important. In most lines, they are a matter of proper selection. But, in education, the material with which a teacher must work to produce an educated youth cannot be standardized; it varies greatly in many respects, so much so that its handling in some instances calls for special equipment and a specially qualified operator.

Federal aid in the financing of educational facilities perhaps is needed, as the President said, to enable the nation's education "plant" to "cope with the enormous burden of present and future enrollments." But, the need is far broader, and in its other aspects it is more emphatically true that that help, as the President said, "should not imply a permanent acceptance of responsibility which belongs, not to Washington, but to the local governments, and the local communities, and to the people themselves." One of the basic responsibilities is the providing of local school boards better qualified in every way than are many of those now holding office.

## Pesticide Popularity Grows

Comes now another pesticidal season. It has some new aspects in the northeastern section of the country, and they do not present the economic problem which some commenters have been finding in the conflict between paying farmers to keep acreage out of production and selling them production boosters which at least come close to offsetting the reduction resulting from the banking of soil.

One of the biggest parts of this season's early program has to do with the necessity of combatting the increased prevalence of the gypsy moth in the forests of the middle and New England states. Appropriations for cooperative federal and state spraying of infested woodlands are reported to amount to about five million dollars for operations in nine states, covering millions of acres. The spraying is to be done with an oil solution of DDT which was found last year to be very effective.

Another unusual objective of pesticidal programs in much of the same area is the destruction of mosquitoes newly discovered to be infection-carrying reported to be contributing to the substantial reduction of natural populations of pheasants and other game birds and some song birds. Among the plans being discussed in that connection are some for endeavors to circumvent the reported increasing resistance or immunity of mosquitoes with respect to the effectiveness of many new synthetic insecticides. A deal of interest in that connection is being aroused by reports that the federal entomologists have discovered a synthetic synergist that greatly increases the already well proven efficacy of pyrethrin. There are still many students of the problems presented by insect pests who are sticking to the belief that the old-fashioned bug-killers of the arsenical types are the most reliable under any and all circumstances and conditions which are incidental to insecticidal campaigns.

In the pesticide industry this season's biggest opportunity is seen by most to lie in the herbicidal division. That, of course, does involve the conflicting objectives of governmental and commercial approaches toward the bettering of the welfare of the tiller—or banker—of the soil. It is being contended in that connection that the proper application of weedkillers and other pesticides by the farmer takes care of his insoluble problem of manpower and also gives him an opportunity to cut down his overlong working day and thereby find time to do something himself for his welfare—and that of the payers of the cost of governmental aid—by way of useful and profitable direct selling of his products in a roadside stand. That is one good realistic achievement, because the biggest reason for the farmer's unsatisfactory economic position is his failure to complement his variously increased productive capacity with a commensurate distributive activity. Roadside selling, from a fixed stand or a mobile truck, can encompass much more than garden truck and sweet corn. There is, for example, a big opportunity to sell properly cleaned wheat, rye, and barley as easily prepared, tasty, nutritious family foodstuffs—if a bit of simple education for housewives is applied to the endeavor.

## What's Ahead for Business

Seventy-one "leaders in the economic life of New Jersey" constitute a committee that is arranging a conference for May 16 to discuss what is ahead for business. There well would be similar exploratory undertakings in every state. The expert prognosticators are pointing all over the field, but flushing little if anything worth shooting at.

The members of the New Jersey explorers group are representatives of manufacturing, distributing (including retailing), advertising, banking, building, insurance, labor, and newspapers. It is to be expected that they will start off with at least as many kinds of views on what is in store for any one or all of the groups, depending on what each most recently saw in the way of learned (?) opinion on how things are going to be in, for, and to business from the second half of 1957 to the first quarter of 2000.

Insofar as the current year is concerned, optimism still reigns supreme. Everything is good and is going to be better. That, of course, is good for business; because as long as people can be got to believe that times are good, they will continue to do what keeps them good. For business, as well as for all other human activities, conditions are man-made, except insofar as floods, droughts, blizzards, tornadoes, and other contributions by uncooperative nature get into things. It takes more than words to support an optimistic outlook under the circumstances created by such contributions. But, just now there is optimism even under the seriously curtailed assets in the way of cattle and other food animals; although the consumer must expect to pay to maintain the rosiness of the atmosphere in productive areas.

One of the most popular supports for the current optimism among the proclaimers thereof is the opinion that the consumer is going to keep on doing at least all that is expected of him—and her—for the maintenance of good business. There is a difference among the opinions on the extent to which the consumer will volunteer to support what is popularly referred to as the necessary expansion of markets, or will have to be "drafted" by way of increased efforts to reach higher goals in sales.

There is much more encouragement for the optimists in the view that selling must be bettered than there is in the reports that manufacturers prominent in many lines are curtailing their operations—and reducing employment —because demand for their products has fallen off substantially. There seems to be some reluctance or something on the part of some members of business to recognize that demand will of itself grow only so far, and must be cultivated. The meeting of the increasingly apparent need for more effective selling offers the biggest problem for all who are in any manner concerning themselves with making what is ahead for business what it should—and must—be.

## *Washington Talks It Over*

### Economy Wave Gripping Congress May Develop into Move To Consider Reduction in Taxes This Year or Next.

By Ralph L. Cherry
Chief, OPD Washington Bureau

The economy wave that has gripped the house since the full impact of the President's $72 billion budget for fiscal 1958 first began to register with the voters is developing into a real and earnest movement that may produce results sufficient to warrant serious consideration being given to a reduction in taxes—if not this year, then next.

So far, the house has taken up six of the twelve annual appropriation bills that come up for action each year and out of these six the house has cut a little more than $1 billion below the budget. The six bills carry slightly over $14 billion. Among the six bills yet to come are two of the largest appropriation bills—Department of Defense and foreign aid. Members are talking of cuts in these two bills alone of more than was taken from the six already passed.

Of course, the real test of the strength of the economy move will come on the final votes that send the bills to the White House for the President's signature. The usual procedure has been for the senate to restore most of the cuts made by the house and then battle it out in conference.

The senate hasn't acted as yet on any of the appropriation bills passed by the house and there is no way of telling what the trend will be. But there are indications the senators also are hearing from back home. There is a strong current of economy talk going on in the senate which gives rise to hopes that the upper house will not be as liberal with the public funds this year as in the past.

### Health Legislation Asked

The administration has renewed its request for legislation to improve voluntary health insurance coverage by allowing smaller insurance companies and nonprofit associations, such as Blue Cross and Blue Shield, to pool their resources in order to develop new or improved plans and policies. The proposal is similar to one advanced last year.

The legislation that has been introduced to carry out the recommendation cites protection against unusually severe or costly illness as one of the areas where greater progress is especially needed. Other specific needs cited are better coverage for older persons, for farmers and others in rural areas, for the self-employed and those who work in small plants, and for those who already have physical disabilities or impairments.

It is contemplated that a variety of pools might be formed to meet special needs. Also, it would permit the companies jointly to employ a staff, such as statisticians, actuaries, or marketing experts, to develop improved policies and methods of extending them to more people. Both the Federal Trade Commission and the Attorney General must be consulted before any pooling arrangement is permitted. In addition to being consulted, the Attorney General must approve the pooling plan and he can withdraw approval if it fails to operate in the public interest.

### Foreign Purchasing Agencies

Bureau of Foreign Commerce has a newly revised list of foreign purchasing agencies in the United States representing more than fifty countries. It's available from the Government Printing Office or from any field office of the Department of Commerce at 10 cents a copy.

The list of agencies, by country, with their US addresses, includes foreign government missions which have procurement and purchasing functions, as well as agents representing French groupements and nationalized companies.

# Heavy Chemicals

Zinc cyanide advanced last week. For this chemical, it was the first price change since December, 1951. Copper cyanide was lower during the week, the decrease resulting in part from recently reduced metal costs. The strike at the works of a producer of chlorine received scant notice last week. Chlorine supplies were plentiful, and some sources even reported slight declines in their sales during the strike. Caustic soda stocks were in fairly good balance, due to cutbacks in chlorine production.

Soda ash sales continued to lag, due in large part to reduction in manufacture of window glass, which in turn stemmed from reduced new construction. There was some concern over the rapidly climbing supply of primary aluminum, which might necessitate cutbacks in output of that metal during the next few months.

Mineral acid sales continued in good volume, despite slipping steel production. Hydrochloric acid competition sprang up with renewed vigor in the south, and sharp discounting was reported.

Sulfuric sales to the steel industry have been tapering, in accord with dipping steel output. However, consumption for use in fertilizer manufacture has in part compensated for the loss of steel demand.

The American Paper and Pulp Association reported production for the week ended April 6 at 95.3 percent of theoretical capacity, as compared with the revised figure of 96.4 percent for the previous week, and 99.2 percent for the corresponding week of last year.

### Price Trends

**Advanced**

Tin, ¼c. per lb.
Zinc cyanide, 2.7c. per lb.

**Reduced**

Copper cyanide, 2.2c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 104.40 | 104.40 | 104.14 | 101.49 |

*For Current Prices See Page 9*

## Acids

**Hydrochloric**—Buying interest was fairly active during the week for a number of end uses. However, there were signs of weakness in the price structure which were not previously evident.

Price cutting was again reported more the rule than the exception for large volume shipments in the south. Quotations were reportedly being shaded more than $1 per ton in some situations.

Keen competition continued in the New York metropolitan area as well. This situation was not by any means new, but has been going on for a long time, due to plentiful supplies in the area.

One factor in the widespread shaky structure in muriatic acid prices is increased production of pesticides and other chlorinated hydrocarbons, which has accounted for a large volume output of by-product acid, particularly in the south.

**Hydrofluoric** — Despite the continued drop from week to week in steel production, there has been little evidence of a decline in output of stainless steel. As a consequence, hydrofluoric acid demand from the stainless industry has been relatively constant for the last several weeks.

**Phosphoric**—Buying interest for use in fertilizer has accounted for a sharp increase in production during the past two months. Despite late cold weather in many areas of the nation, fertilizer buying continued to expand during the week. Other inquiry for use in the feed and food industry was well maintained.

**Sulfuric** — Steel, rayon and other end uses have shown slightly decreased buying interest during the past few weeks. Fertilizer inquiry has in part made up for lost demand from other industries.

Steel output last week was estimated at 2,328,000 tons, or 91 percent of capacity by the American Iron and Steel Institute, as compared to actual output of 2,319,000 tons, or 90.6 percent the previous week.

## Bases and Salts

**Calcium Chloride**—There was little activity in this market during the week, except for some spot business for ice control in areas affected by late cold snaps and snow storms.

Otherwise, buying interest tapered off to a low between-season level. Demand is not expected to pick up until material is needed in large volume for dust control on secondary roads during the summer.

**Caustic Potash**—Producers continued to report a good volume of business, although with the addition of new producing facilities, it was conceded that competition was becoming sharper.

The future possibilities of higher potassium phosphate detergents have been the white hope of the caustic potash and potassium carbonate industries for some time, it was reported. With this in mind an increasing number of producers has been coming, or is planning to come, into the industrial potash market.

**Caustic Soda**—The strike at the works of a producer has had little or no effect on this market. Makers remaining in operation feel that there is little likelihood of a shortage as a result of the strike, even should it prove lengthy.

Supplies of liquid and solid caustic soda have been plentiful for some time. Decreased consumption for use in paper, rayon and other materials has been fairly well balanced out in recent weeks by cutbacks in output of chlorine, so that supplies have not become burdensome.

January daily caustic soda production declined to 94 percent of capacity, or 12,000 tons per day, as against a 95 percent rate, or 12,100 tons per day in December, according to the Bureau of Census.

**Chlorine** — The labor dispute at the works of a producer in the southwest has been scarcely noticed on the market in recent weeks. Some makers have even reported a slight decline in sales despite the walkout, which has taken chlorine production out of the market.

January daily output of chlorine gas declined to 99 percent of capacity, or 10,800 tons per day from the formidable 101 percent of capacity, or 11,000 tons per day racked up by the industry in

### Inorganic Chemicals Output: 1956

The following preliminary figures compiled by the Bureau of Census indicate production of industrially important inorganic chemicals, in tons.

| | 1956 | 1955 | | 1956 | 1955 |
|---|---|---|---|---|---|
| Acid, chromic | 16,897 | 15,414 | Soda, caustic, electrolytic liq. | 3,790,552 | 3,438,509 |
| Hydrochloric | 911,430 | 842,627 | lime-soda, process, liq. | 422,014 | 465,929 |
| Hydrofluoric | 75,500 | 63,828 | Sodium Bicarbonate | 105,463 | 112,429 |
| Nitric | 2,574,143 | 2,305,466 | Chlorate | 55,068 | 46,613 |
| Phosphoric | 3,573,025 | 3,440,351 | Metal | 136,017 | 114,724 |
| Sulfuric, gross | 16,025,476 | 15,758,284 | Phosphate, monobasic | 8,411 | 8,591 |
| Aluminum chloride, anhyd. | 34,357 | 34,573 | Dibasic | 28,356 | 29,363 |
| liq., cryst. | 14,593 | 13,609 | Tribasic | 48,732 | 51,846 |
| Calcium carbide | 1,024,571 | 874,948 | Meta | 59,375 | 57,807 |
| Carbon dioxide, liq., gas | 279,684 | 221,843 | Tetra | 102,478 | 101,775 |
| solid | 547,820 | 558,780 | Acid Pyro | 15,489 | 15,245 |
| Chlorine gas | 3,785,631 | 3,407,935 | Tripoly | 586,911 | 556,337 |
| Phosphorus, elemental | 312,213 | 292,954 | Silicate | 644,411 | 630,269 |
| Oxychloride | 17,450 | 16,235 | Sulfate, anhyd. | 298,878 | 288,788 |
| Trichloride | 16,740 | 15,475 | Glaubers salt | 128,543 | 150,248 |
| Potash, caustic, liq. | 92,234 | 90,385 | Saltcake, coml. | 725,723 | 685,215 |
| solid | 19,860 | 20,351 | Sulfide, conc. | 30,322 | 28,285 |
| Soda ash light | 2,655,306 | 2,701,220 | other | 30,264 | 29,249 |
| dense | 1,934,513 | 1,768,749 | Sulfur dioxide | 65,561 | 58,495 |
| natural | 105,463 | 112,429 | | | |


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# Heavy Chemicals

December, according to the Bureau of Census.

**Copper Cyanide**—Prices were decreased last week for copper cyanide owing in part to recent weakness in the metal. Cyanide was newly quoted at 69.8c. per pound, drums, 20,000-pound lots and more, f.o.b. works; 70.8c. per pound, 1,000-pounds and more; 72.8c. per pound, 300-900-pound lots, and 74.8c., 100-200-pound lots.

**Soda Ash**—Buying interest was nothing more than routine. Demand in recent weeks has received setbacks owing to declines in construction, window glass, aluminum production, and a number of other end uses. Some producers held out hopes for an improved second quarter.

Daily average production in January slipped to 76 percent of capacity, or 12,200 tons per day, as against a ratio of 79 percent of capacity, or 12,700 tons per day in December, according to the Bureau of Census.

**Sodium Phosphates**—Buying interest has been moderately well sustained on the phosphates over the past few weeks. Synthetic detergent manufacturers maintained good call. Prices were expected to hold without change for the remainder of the second quarter.

**Zinc Cyanide**—Prices were advanced last week for the first time since December, 1951. Zinc cyanide was newly scheduled at 54c. per pound, 20,000-pound lots and more, f.o.b. works, in drums; 55c., 1,000-19,000-pound lots; 57c., 300-900-pound lots, and 59c., 1-200-pound lots.

## Nonferrous Metals

**Aluminum**—Domestic production of primary aluminum in January totaled 147,029 tons, according to the Bureau of Mines. This was a decline of 1,362 tons, compared with the December, 1956, total, but was an increase of 6,635 tons, or 4.7 percent above the January, 1956, total.

January month-end stocks of 145,131 tons were more than seven times the quantity held a year ago and were considered by industry spokesmen as ample to meet current requirements but not representing an oversupply of material.

It is anticipated that the output in the United States will be reduced about 5 percent in the first quarter owing to low water supplies in the Bonneville and Tennessee Valley areas.

**Tin**—Market fluctuated narrowly, and was quoted at 98¾c. per pound, spot on Friday.


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## Obituaries

### Homer C. Fritsch

Homer C. Fritsch, executive vice-president and a member of the board of directors of Parke, Davis & Co., Detroit, Mich., died April 8 in Montreal, Canada. He was sixty-two years old.

Mr. Fritsch, who joined Parke, Davis as a chemist in June, 1916, was one of twenty-three employees still active who had been with the company forty years or more.

Beginning in the analytical department, he rose through the production division until he was named vice-president and general manager in 1942.

In 1946, Mr. Fritsch was named to the board of directors, and in 1951, was promoted to executive vice-president, the position he held at the time of his death.

### Charles J. Romieux

Charles J. Romieux, vice-president of Capital Plastics, Inc., Rochester, N. Y., died April 8 in Brussels, Belgium. He was sixty years old. Mr. Romieux had been sales manager in the plastics and resins division of American Cyanamid Company, New York, prior to joining Capital Plastics in 1955.

### William G. Skelly

William G. Skelly, chairman of the board of Skelly Oil Company, died April 11 in Tulsa, Okla. He was seventy-eight years old.

Mr. Skelly organized and founded Skelly Oil in 1919. With the development and growth of that concern, his influence in the western oil business grew and he at one time headed Mission Corporation, a holding company and Pacific Western Oil Corporation along with Skelly.

**Ernest Benke,** who retired in 1951 as manager of the import department of General Dyestuffs Corporation, New York, died April 8 in Paramus, N. J. He was eighty-six years old.

**J. Fred Schott,** development manager of the footwear and general products division of United States Rubber Company, New York, from January, 1954, until March, 1957, died April 4 in Mishawaka, Ind.

## *'Rilsan' Synthetic*

*—Continued from page 5*

than nylon, is non-allergic and has a softer hand than nylon.

Production is relatively small at the present time and while that is expected to restrict shipments here for the first few months, the company expects to have enough by the end of the year. Snia Viscosa is also experimenting with a wide range of blends made with "Rilsan."

In noting the development of "Rilsan," *France Actuelle,* a business publication, stated that since the war the annual production of plastics in France has increased sixteen-fold, or from 8,400 tons in 1938 to 130,000 tons last year.

This production rise is meshed with a soaring demand on the home market. In 1953, France consumed an average 1.3 kg. of plastics per person; by 1956 the nation was using an estimated 3.5 kg. per person. The call was particularly high for vinyl resins, and strong for phenoplasts, polystyrenes and aminoplasts.

Industrial and public demands for polyethylene are growing so fast that the present 4,000-ton French production is utterly insufficient, and three new plants are now being built in the Lower Seine region, near petroleum company ethylene sources.

Foreign markets also are eager to buy French plastic products. Exports are now over 10,000 tons a year, and earn the country some 4.5 billion francs ($12.9 million).


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# *Main Features of FDA Additives Bill*

**Following is Food and Drug Administration's explanation of the principal features of its draft bill "to protect the public health by amending the federal food, drug and cosmetic act to prohibit the use in food of chemical additives which have not been adequately tested to establish their safety":**

## I. Objectives

The major purpose of the bill is to fill a gap in protection of consumer health under the federal food, drug and cosmetic act by prohibiting the distribution and use of chemicals as intentional food additives, or for any other purposes which may directly or indirectly result in the chemical's finding its way into or affecting a food, unless the intended use of the chemical is generally recognized among competent experts as safe for the consumer of this food or unless such use has first been found to be safe by the Department of Health, Education and Welfare on the basis of adequate scientific test data (usually to be furnished by the sponsor). An additional purpose is to advance food technology by permitting use of a technically poisonous or deleterious substance as a food additive within an officially established safe tolerance when such use is found to have functional value, whereas existing law bars such substances even at a safe level unless required in production or unavoidable by "good manufacturing practice."

## II. Scope of the Bill

1. The bill covers only so-called "intentional" additives, i.e., substances the intended use of which results or may result, directly or indirectly, in their becoming a component or otherwise affecting the characteristics of a food, thus excluding from the scope of the bill wholly accidental additives, i.e., those which are neither intended as components of food nor have the potential, under the conditions of their intended use, of becoming a component of food or affecting its characteristics. The principal examples of additives covered by the bill are chemicals used in connection with food production, preservation, manufacture, packing, processing, packaging, transporting, or holding food, and radioactive materials used in food processing or for subjecting food to radiation.

2. In order to bring a chemical within the scope of the bill, it would have to be one which is not generally recognized among competent experts as having been adequately shown through scientific procedures or through prolonged use in food to be safe for use under the conditions of its intended use. Substances used in accordance with a sanction or approval granted prior to the enactment of this bill pursuant to the federal food, drug and cosmetic act or to the meat inspection act would likewise be excluded. (This, of course, would not prevent rescission of such a sanction or approval, and consequent inclusion of the additive under the bill, if the particular use of the additive is subsequently found to be toxic or of doubtful safety.) The secretary would also be directed to provide by regulation for exempting chemical additives, and other foods containing such additives, from the requirements of the bill when intended solely for investigational use by experts; and he would be authorized to exempt by regulation any other chemical additive, or a food containing it, when in his opinion such an exemption is consistent with the public health.

3. Pesticide chemicals in or on raw agricultural commodities, or when intended solely for use in the production, storage, or transportation of such commodities, would likewise be excluded from the scope of the bill, the use of such additives being already safeguarded by the pesticide chemicals amendment (P.L. 518, 83rd Cong.). Moreover, in consonance with a regulation now in force, the requirements of the bill would not apply to a pesticide residue which, after processing of a raw agricultural commodity by cooking, freezing, dehydrating, or milling, is unavoidably left in the processed food, where the concentration of the pesticide in the processed food when ready to eat does not exceed the tolerance allowed under the pesticide chemicals amendment with respect to the raw agricultural commodity and that commodity met the requirements of the amendment.

4. In view of the meshing of the federal food, drug and cosmetic act (sec. 902 (d)) and the meat inspection act, the bill expressly provides that it shall not be construed to relieve any person or any meat or meat food product from compliance with any requirement of that act. Thus, a chemical additive intended for use in meat or meat products would have to comply with regulations under this bill before being shipped to an establishment subject to the meat inspection act but would not be allowed in meat until it likewise meets requirements under that act. (Regulations under the latter act are not limited to considerations of safety.) Nor is the bill intended to relieve from requirements imposed by other laws, such as the federal insecticide, fungicide and rodenticide act or the atomic energy act of 1954.

## III. Means of Effectuating the Bill's Objectives

1. A food—which by definition would include an intentional chemical additive as above-described—would be deemed to be adulterated and hence within the prohibitions and civil and criminal sanctions of the federal food, drug and cosmetic act, if it is, or if it bears or contains, a chemical additive which is unsafe within the meaning of a new section, i.e., section 409, to be added to the act by the bill. Under such new section, the chemical additive would be deemed to be unsafe with respect to any particular use or intended use of such additive unless such use or intended use either conforms to the terms of an exemption granted by the Secretary or to a regulation issued under this section and announcing the conditions under which such additive may be safely used. (Section 406 (a) of the act, which now prohibits or restricts the use of added poisonous or deleterious substances in food, would become inapplicable to chemical additives falling within the scope of the bill.)

2. A proposal for the establishment of a regulation as to the safety of a chemical additive could be made either by way of a petition filed by any interested person (presumably the manufacturer of the additive in most cases), with submission of full test data, samples of the additive (when requested), etc., or by the secretary on his own initiative or on the request of any interested person. A regulation actually issued might or might not be the same as that proposal. The petitioner (or any person entitled to file such a petition where the proposal is made by the Secretary) could require that before action by the secretary, and within certain limits after such action, the petition or other proposal, or any question of fact raised thereby, be submitted for study and recommendation to an advisory committee appointed by the secretary from among experts selected by the National Academy of Sciences. Likewise, the secretary could on his own initiative refer the proposal or any subsidiary question of fact to such an advisory committee. The referral of a matter to an advisory committee on request could, by regulation, be conditioned on the payment of fees to defray the cost occasioned by such referrals.

3. No regulation permitting a proposed use of a chemical additive could be issued unless the scientific data submitted to or otherwise before the secretary establish that such use of the additive will be without hazard to the health of man or other animals consuming any food which may directly or indirectly be affected by such use. This would include any food that is yielded by, or derived from, an animal or plant into which a chemical additive has been introduced by feeding or otherwise. For example, in the case of fertilizer to be sprayed on or otherwise to be introduced into a plant, the safety of any residue of the additive or its breakdown or reaction products which will ultimately find their way into food derived from such plant and consumed by man or animal would have to be established. Similarly, in case of an additive introduced into a food-producing animal directly or through introduction into its environment or food, it would have to be established that the edible flesh of the animal or food products derived from the living animal (such as milk, eggs, etc.) are safe for the human being or animal whose diet will ultimately be affected. In determining safety, the secretary would have to take into account the total lifetime diet of man or other animals involved, as affected by such additive and any chemically or pharmacologically related substances in the diet. Moreover, the data before the secretary would have to establish that the additive has functional value, unless the secretary finds that the additive is not a poisonous or deleterious substance.

4. Any person adversely affected by a regulation issued by the secretary, or by his refusal to issue a regulation, could file objections to the secretary's order, stating reasonable grounds for such objections, and would thereupon be entitled to a public hearing. The secretary's order issued after such hearing would have to be based solely on substantial evidence of record at the hearing, including any report or recommendations of an advisory committee to which a referral had been made. In a case of actual controversy as to the validity of any order issued after hearing, any person who would be adversely affected by such

order could obtain judicial review thereof in a United States court of appeals in accordance with the provisions now applicable to regulations issued under the pesticide chemicals amendment.

5. The secretary would be required to prescribe similar procedures for amending or repealing regulations issued under the bill.

### IV. Effective Dates and Transitional Provisions

1. In general, the bill would take effect on the 180th day after its enactment. However, any interested person would be permitted to start the procedure for the issuance of a regulation as to the safety of a particular additive before such effective date, in which event the procedure would be carried to completion without delay but the additive would not have to conform to the regulation until such effective date.

2. In order to allow a reasonable period for industry adjustment in the case of chemical additives already in use prior to the enactment of the bill, those provisions of the bill under which a food (including a chemical additive, which is deemed a food) would be deemed adulterated unless a safety clearance regulation is issued and complied with, would not become effective until such a regulation is finally denied or is actually issued and has become finally established or, if earlier, until the expiration of either one or two years (as determined by the secretary in the light of the risk to public health) following the 180-day effective date of the bill.

## *Chemical Progress*

*—Continued from page 7*

the development of a new science curriculum for elementary and secondary schools, initiation of the city's Advisory Committee on Science Manpower Commission, and a program for providing summer employment in industry for science teachers.

Another part of the New York celebration was a panel discussion on science education, featuring state and national leaders. Dr. J. Darrell Bernard, chairman of the department of science education at New York University, served as chairman.

In Washington, D. C., the celebration took an international turn. The Chemical Progress Week committee of that city was host at a luncheon for Dr. Julius Horvath, a Hungarian scientist who escaped from his country after the revolution and is now living in Buffalo, N. Y.

### Ciech Representative in New York

Z. Lodzinski, a representative of Ciech, Ltd., industrial and coaltar chemicals firm of Warsaw, Poland, has arrived in New York and will be attending the World Trade Fair at the Coliseum starting this week. He can be reached c/o Kolon Trading Company, 32 Broadway, New York. Kolon is exclusive representative for the Polish concern.


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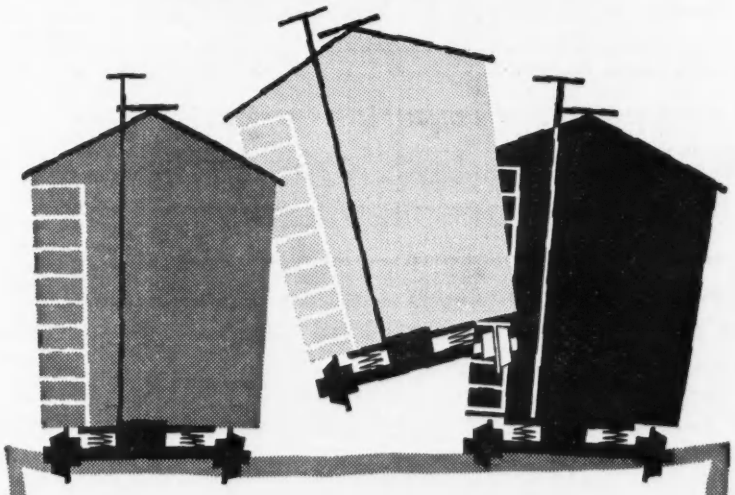
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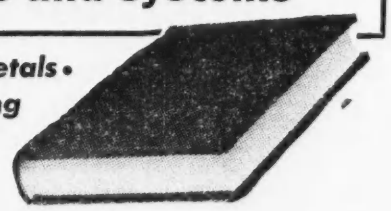

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# Petroleum Derivatives

Sales of petroleum derivatives were proceeding at a steady pace last week. There was no further action on solvent prices, and nothing new was observed in patterns of consumption. Following the advance in crude oil quotations, aliphatic solvents and mineral oil were increased in price. Other materials have been left unchanged—in some cases because market conditions seemed unfavorable to a price advance, and in other cases because the increase in crude quotations could easily be absorbed.

Daily average output of natural gas liquids during January was reported last week by the Bureau of Mines at 34.7 million gallons, an increase of three percent over January, 1956. The Bureau also issued a report in which the amount of domestic crude oil to be consumed during April was estimated at 7,290,000 barrels daily. This compares with the Bureau's forecast for the month of March in which 7,900,000 barrels daily was predicted. The latest estimate includes a total gasoline demand of 4,100,000 barrels daily, a gasoline yield of 43.8 percent and crude runs amounting to 7,825,000 barrels per day.

## Price Trends

**Advanced**
None.
**Reduced**
None.
**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 107.65 | 107.65 | 107.65 | 104.37 |

*For Current Prices See Page 9*

## Solvents and Diluents

**Aliphatic Solvents**—These materials are generally meeting steady buying interest, producers reported last week. Cleaner's naphtha is featured by particularly good tone right now because of the increase in demand brought on by changed weather. Another upturn in demand is expected to precede the Easter holiday.

The 1c. per gallon advance in prices that was posted in January has been firmly held at all shipping points. This has been possible because a healthy balance exists between supply and demand. The price increase was prompted by the advance in crude oil quotations.

**Benzene**—There has been no move to increase the price of benzene in spite of higher crude oil quotations. Producers find the current sales pace entirely satisfactory although it is conceded that the booming demand reported a while back has given way to a steadier pace. According to one producer here, the exceptionally heavy buying of last December was occasioned by the crude oil advance which had seemed to presage an increase in solvent prices.

Imports of Benzene during January totaled 3,122,797 gallons, according to a report of the Bureau of the Census. This figure compares with a total of 4,460,514 gallons imported in January, 1956. The January level of exports was an insignificant 19,215 gallons, as against 729,069 gallons a year ago.

**Toluene**—Exports of this solvent were reported at 10,278,565 pounds for the month of January. This was a substantial advance over the 4,178,258 pounds exported during the same month of 1956.

There is a strong possibility that the lower rate of steel manufacture will have the effect of easing the oversupply in toluene. However one producer pointed out last week that a decline in steel production could effect other parts of the economy, including industries that require solvents. In his view, there would not be an appreciable change in the supply and demand balance of solvents.

## Lighter Fractions

Daily average output of natural gas liquids was 34.7 million gallons in January, an increase of three percent over January, 1956, the Bureau of Mines reported last week. In the same month, production of liquefied gases at refineries climbed six percent higher than a year ago, the Bureau noted. Stocks stood at 479 million gallons on January 31, as compared with only 213 million gallons a year ago.

**Butane**—Output of this material during January totaled 175,757,000 gallons—129,809,000 gallons at plants and 45,948,000 gallons at refineries—the Bureau of Mines reported last week. On January 31 stocks at plants, terminals and underground stood at 136,570,000 gallons, as compared with 145,015,000 gallons on December 31. Refinery stocks totaled 32,340,000 gallons on January 31 as against 31,332,000 gallons on December 31. Deliveries for gasoline use during the month were reported at 87,566,000 gallons. Shipments for other uses amounted to 70,399,000 gallons, the Bureau noted.

**Propane**—Production of this liquefied gas in January totaled 293,489,000 gallons at plants, while refinery output amounted to 108,864,000 gallons, according to a report of the Bureau of Mines. Taken together these figures show a total production of 402,353,000 gallons. On January 31, stocks at plants, terminals and underground stood at 253,693,000 gallons, having declined seasonally from the 380,345,000 gallons reported for December 31. Refinery stocks added up to 17,280,000 gallons on January 31, as against 20,370,000 gallons on December 31. Deliveries for gasoline use during the month were reported at 3,150,000 gallons, while shipments for other uses amounted to 529,005,000 gallons, the Bureau noted.

## Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended March 23 totaled 254,102,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 251,921,000 barrels of the preceding week, this represents an increase of 2,181,000 barrels, comprising an increase of 1,945,000 barrels in stocks of domestic crude and an increase of 236,000 barrels in stocks of foreign crude.

## Miscellaneous

**Crude Oil**—Current reports of the industry for the week ended March 22, 1957 indicate an increase in crude-oil production and a decrease in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,818,000 barrels, an increase of 19,000 barrels from the preceding week. Daily average crude runs to stills of 7,976,000 barrels were 122,000 barrels below the preceding week, and 6,000 barrels above the week ended March 24, 1956. Runs of foreign crude amounted to 758,000 barrels daily, compared with 738,000 barrels in the preceding week. For the four-week period ending March 22, crude oil production averaged 7,737,000 barrels daily, and crude runs to stills averaged 8,057,000 barrels daily with runs of foreign crude averaging 780,000 barrels daily.

The amount of domestic crude oil to be consumed or exported in April was estimated last week by the Bureau of Mines at 7,290,000 barrels daily as compared with the March forecast of 7,900,000 barrels per day. This latest estimate includes a total gasoline demand of 4,100,000 barrels daily, a gasoline yield of 43.8 percent and crude runs amounting to 7,825,000 barrels per day.

Current figures of the Bureau indicate average daily crude runs of 8,030,000 barrels during March against a domestic demand level of 7,720,000 barrels per day. Crude exports, according to these preliminary data, averaged 400,000 barrels during the month.

Actual data for January showed a crude production averaging 7,480,000 barrels per day, with domestic crude stocks decreasing 239,000 barrels daily. The indicated demand for domestic crude oil was reported at 7,769,000 barrels daily. Actual crude runs in January averaged 8,273,000 barrels, including foreign crude runs of 7,996,000 barrels, the Bureau reported.

**Gasoline**—Motor fuels advanced 1c. per gallon when crude oil was increased in price, but in most areas the advances failed to hold because of competitive conditions.

## *Additives Measure Makes Slight Concessions*

*—Continued from page 3*

tive may be used, the maximum quantity which may be used or permitted to remain in or on such food, the manner in which such additive may be added to or used in or on such food, and any directions or other labeling or packaging requirements for such additive deemed necessary by him to assure the safety of such use or uses), and shall notify the petitioner of such order."

The additives covered by the bill are those which are intended directly for use in foods, or those which find their way in foods by indirect routes, such as through packaging, or through the use of fertilizers. Because pesticide chemicals are covered by a different law they are exempt, as are substances used in accordance with a sanction or approval granted by other sections of law such as ingredients named in food standards, or substances sanctioned by the Meat Inspection Service of the Department of Agriculture.

**How the Bill Works**

The mechanics provided for in the bill are these:

- An application must be filed with the Secretary (normally by the manufacturer of the chemical additive) for a regulation permitting use of the additive in food, or its exemption from the law. The application or petition must set out certain information relative to the additive, including a statement of the conditions of the proposed use and specimens of the proposed labeling, a full description of the methods, facilities and controls for production of the additive, and full reports of toxicity tests.

- The secretary then has ninety days in which to issue or reject the regulation applied for, or the secretary may extend the period for another ninety days to complete his investigation. During this period, the petitioner may ask that the matter be referred to an advisory committee of experts to be selected by the National Academy of Sciences. The committee has sixty or an additional thirty days if needed, to report.

- Any person aggrieved by a regulation of the order of the secretary may ask for a public hearing before the Secretary and the advisory committee must designate a member to appear and testify with respect to the report of experts. In case of acutal controversy as to the validity of any order issued by the Secretary, appeal then may be made to the Circuit Courts of Appeals.

In a statement in connection with the proposed legislation, Secretary of Health, Education, and Welfare, Marion B. Folsom said:

"This bill deals with the problem of safety to the consumer arising from the widespread and increasing use of chemicals in modern food processing technology. Within the last twenty years hundreds of chemical substances have been added to foods, and the serach for new chemicals to improve foods is being accelerated. Many have not been subjected to adequate scientific investigation to determine their safety. It is essential to the public health that we know that proposed ingredients are safe before they are used in food.

**Burden of Proof on Government**

"Under existing law, no action can be taken to stop the use of a chemical until the government can prove to a court or jury that it actually is poisonous or harmful. As a rule, a minimum of two years of scientific research is needed before any legal proceedings can be started. In the meantime the chemical can be used in food.

"Although the majority of chemical and food manufacturers investigate carefully all materials which they propose to use in their products, present controls do not assure adequate public protection. So many chemicals are now in use that the Food and Drug Administration is not able to do all of the testing that is needed. The proposed bill, therefore, makes the chemical manufacturer responsible for proving the safety of his product before it can be used."

In detrmining safety, the Food and Drug Administration scientists would take into account the total consumption of different additives in the diet and their possible cumulative effect. The bill would not change the existing ban against foods which are accidentally contaminated by poisonous or deleterious substances, regardless of the amount of contamination.

The chemical additive problem has been under consideration by congress since 1950 when the House of Representatives authorized the formation of a select committee to investigate the use of chemicals in foods and cosmetics. The committee reported its findings in 1952. The pesticide chemicals amendments followed two years later. Last year a subcommittee of the the house committee on interstate and foreign commerce held hearings on several bills to provide additional control of chemical food additives.

"These efforts," Secretary Folsom said, "have all been productive of a better understanding of a very complex problem—how to insure the safety of these additives without interfering with the improvement of food products in ways which benefit the consumer. We believe the proposed bill provides an adequate pretesting requirement and at the same time is fair and workable from the standpoint of the food and chemical industry."

## *Estrogen Compound*

*—Continued from page 5*

days. To maintain prolonged estrogen activity, doctors have to imbed estrogen pellets under the skin of patients.

A dose of Dr. Noland's compound provides estrogen activity for one year in rats, longer than the pellet implantation method, and it avoids the surgery. Action of the compound appears to be at least as great as that of other estrogens, VA said.

Etrogen is used by doctors to treat many conditions, including cancer of the prostate gland and the mental and emotional disturbances that sometimes accompany the "change of life" in middle-aged persons.

Dr. Noland said clinical trials of his compound in patients with prostatic cancer at the Wood VA center will be conducted as soon as preliminary studies on the chemical are completed.

In agriculture, the hormone estrogen is used to fatten beef cattle and tenderize chickens. Dr. Noland's cheaper, prolonged-acting compound may offer improvement over presently used estrogens, VA said.

The new estrogen was discovered by Dr. Noland after he had found how to modify cholesterol, a fatlike material that is thought to be a contributory cause in hardening of the arteries.

When he attached a certain acid group to cholesterol, the resulting chemical could not be absorbed from the intestinal tract.

By attaching two of the same acid groups to diethylstilbestrol, he produced the new estrogen which is believed to resist breakdown into other products by the liver.

## *Chemical Stocks*

*—Continued from page 7*

manufacturing concerns, as reported by the Federal Reserve Board, have been as follows:

| | 26 Chemical Companies Percent | 200 Manufacturing Concerns Percent |
|---|---|---|
| 1947 | 17.6 | 13.2 |
| 1955 | 21.2 | 14.7 |
| 1956 (nine months) | 19.3 | 12.7 |

In the most recent period, one of slightly receding profit margins for most manufacturers, the percentage reduction in chemical profits per dollar sales has been materially less than the average of all manufacturers. Superior sales growth for chemicals has made aggregate profit experience for the group even more favorable.


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# Aliphatic Organics

Hexamethylenetetramine and methyl methacrylate continued to show exceptional market strength as demand remained moderate for most aliphatic organics. Consumption of hexamethylenetetramine for manufacture of explosives, once a mainstay of this trade, has dwindled to negligible volume, but demand for its use in production of phenolic resins, shell moldings and compounds and several less important consuming products has more than made up for this loss. Market penetration and development were building a solid foundation for trade in methyl methacrylate in heavy volume, with capacity having been developed for production of 125 million pounds per year, equivalent to demand projected for 1960.

Currently heavy production quotas in the leather industry were sustaining trade in formic acid in fairly heavy volume. Movement of the acid into textiles was still a bit slow but better than it had been two months or so ago.

Feed molasses markets weakened generally in the south and middle west as pasture conditions improved, and the New Orleans prices for blackstrap fell off another ¼ cent per gallon in the week ended last Tuesday. Demand for livestock feed was feeble, and trading in those sections of the country was more or less limited to hand to mouth requirements. Demand continued slow at New Orleans, with supply adequate.

Winter weather prevailed in the northeast and along the west coast, where blackstrap markets were stronger and prices held at previous levels. The New York blackstrap price was unchanged, with demand there still moderate and supply adequate.

Glycerine prices were firm and expected to hold at the current level for at least a few months, trade sources reported. It was noted that both consumption and production were at a high level currently and that January consumption (most recent month for which complete data were available) represented a sharp increase over that of the month previous and was substantially ahead of the monthly average noted in 1955. Over the two months December and January last, domestic consumption of glycerine exceeded domestic production. While producers' stocks showed a very slight gain during this period, it was entirely attributable to excess of imports over exports. Imports rose sharply in January and were expected to increase still more. Volume of exports was expected to remain steady.

Producers said that a good market for 3-methoxy butanol was developing, lacquer producers in particular showing an interest in this material for use as a high boiling point solvent on account of properties of slow evaporation, high solvent power and high diluent tolerance. Other outlets were use as a coupling agent in production of heavy duty brake fluids, as an extractant in manufacture of pharmaceuticals and as an intermediate in production of 2,4-D herbicide, urea and melamine-formaldehyde resins and phthalate and phosphate plasticizers.

**Formic Acid**—Trade was carried on in substantial volume last week, producers reported, much of the market strength being attributable to currently heavy production in the leather industry. A fair volume of business was accountable to activity in the textile industry, which was on the slow side but improved somewhat over conditions prevalent, say, two months ago. A third market for formic acid was provided by organic syntheses.

Tariff Commission reported production was 1,303,371 pounds during January of this year, compared to output of 1,299,761 pounds in the month previous and 1,374,827 pounds in January, 1956. The commission's preliminary figure for total production in 1956 was 15,268,099 pounds. That for the year previous was 15,594,016 pounds.

**Glycerine**—For the two months December, 1956, and January of this year, domestic consumption exceeded domestic production, with January output up markedly from the rather low figure reported for output in the month previous. While producers' stocks advanced slightly over the two-month period, this gain was attributable entirely to the relatively large volume of imports with respect to exports. Volume of imports rose sharply in January and was expected to be still heavier in the months immediately ahead. Export volume was expected to remain substantially the same.

Trade sources reported that prices were firm and would no doubt hold at the current level at least through the next few months. It was noted that both production and consumption were at a high level, January consumption (latest for which all data were now available) representing a sharp increase over that for the month previous and a considerable gain over the average monthly consumption through 1956.

Stocks at producers' plants as of the end of January represented about three months' supply at current rate of consumption.

**Hexamethylenetetramine**—This market continued firm last week, with strong demand for hexamethlenetetramine for use in manufacture of phenolic resins. Good trade was supported also by shell moldings and compounds and several lesser markets. Explosives, once a mainstay of this market, no longer were an important factor. Purchases for manufacture of explosives were largely restricted to government orders, which have been negligible lately.

Production during January last amounted to 2,721,848 pounds, the Tariff Commission reported, compared to output of 2,007,836 pounds in the month previous and 2,183,994 pounds during January, 1956. The commission's preliminary figures for total production during calendar years were 29,125,147 pounds in 1956 and 20,007,249 pounds in 1955.

**Methanol**—Production of natural methanol during January of this year amounted to 171 million gallons, the Census Bureau reported, comparing with output of 172 million gallons in the month previous and 206 million gallons during January, 1956. The bureau's preliminary calendar year totals for production were 2,281 million gallons during 1956 and 2,194 million gallons during 1955.

Synthetic production during January, 1957, was put at 136,141,482 pounds by the Tariff Commission, which noted that this figure was partly estimated. It was compared to output of 141,511,737 pounds in the month previous and 126,289,686 pounds during January, 1956. The preliminary figure published by the commission representing aggregate production of synthetic methanol during calendar year 1956, a slight revision of the sum of the twelve monthly figures published, was 1,527,442,060 pounds. The preliminary figure representing the total for calendar year 1955 was 1,331,991,608 pounds.

Census Bureau said producers' stocks of natural material on hand as of the end of January, 1957, added up to 316 million gallons, compared to 306 million gallons on hand one month earlier.

**3-Methoxy Butanol**—This material, now available in commercial quantities, has been finding increasing use in industry, producers reported.

Lacquer manufacturers have been using it as a high boiling point solvent on account of its properties of slow evaporation, high solvent power and high diluent tolerance. Another distinguishing property is low rubber swell.

Producers of heavy duty brake fluids have shown a preference for 3-methoxy butanol for use as a coupling agent, and pharmaceutical manufacturers have been employing it with success as an extractant. It has been in demand also as an intermediate consumed in production of

## Price Trends

**Advanced**
None.

**Reduced**
Molasses, New Orleans, ¼c. per gal.

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 131.30 | *131.31 | 130.99 | 131.08 |

* Revised.

*For Current Prices See Page 9*

## Aliphatic Organics

2,4-D herbicide, urea and melamine-formaldehyde resins and phthalate and phosphate plasticizers.

**Methyl Methacrylate**—This market was moving ahead largely independent of general business conditions that influenced most other chemicals. Market diversification and penetration were building solid foundations for trade in heavy volume.

Capacity has been estimated at 125 million pounds per year, which is equal to projected demand for 1960. Raw material availability has improved, with increased production of acetone and a glut of ammonia. Raw material methanol has been in heavy demand in other consuming channels, but its production also has been stepped up substantially. Natural gas was now abundant.

**Molasses**—Feed molasses markets in the south and middle west weakened further, Agricultural Marketing Service reported, and the minimum price for blackstrap at New Orleans again declined ¼c. per gallon in the week ended last Tuesday.

Pasture conditions improved in those sections of the country. Demand for livestock feed was consequently feeble, and buying was restricted for the most part to a hand to mouth basis.

Quotations at New Orleans at last reports ranged from 24½c. to 25c. per gallon, with most sales reported at 24¾c. per gallon. Prices in the week previous had ranged from 24¾c. to 25½c. per gallon. With the exception of four west coast points, these were now the lowest prices in effect at any of 28 market points covered by the marketing service. New Orleans demand continued slow, with supply adequate.

Winter weather prevailed in the northeast, and the New York price of 28c. per gallon was firm and steady. Demand at New York continued moderate, supply adequate.

In general, southern and middle western prices declined, while quotations were unchanged at northeastern and far western points.

Total production of Louisiana cane blackstrap was 31,916,000 gallons in calendar year 1956, off more than 9 million gallons from the 41,248,000 gallons reported in the year previous.

**Oxalic Acid**—Output during December last was 1,843,045 pounds, the Tariff Commission reported, bringing the total for the year to 20,767,368 pounds. Total production amounted to 23,205,949 pounds in 1955. In 1956, production started off at a high rate, maintaining an average of nearly 2.1 million pounds per month through the first five months of the year, including a high of 2,366,574 pounds turned out in March. There was a sharp decline, to 1,628,360 pounds, in June. The commission reported no production at all in August. Thereafter, volume of output increased steadily up through December.

**Pentaerythritol**—The pace of trade last week was described as just average. Trade sources said volume was somewhat heavier than it had been in fourth quarter 1956 and about the same as it was at this time a year ago. This market was largely dependent on demand for PE in manufacture or alkyd resins, which have been on the weak side for the past several months.

Production during January of this year amounted to 5,634,044 pounds, the Tariff Commission reported. Comparable were 4,811,284 pounds turned out in the month previous and the 5,408,452 pounds produced in January, 1956. The commission's preliminary figure for aggregate production during calendar year 1956 was 62,278,677 pounds.

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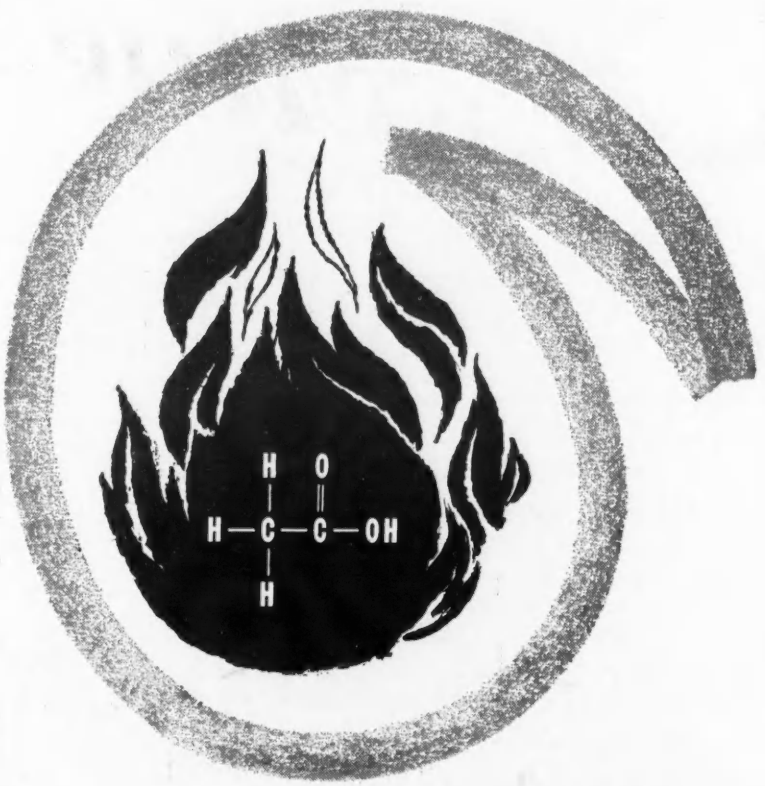


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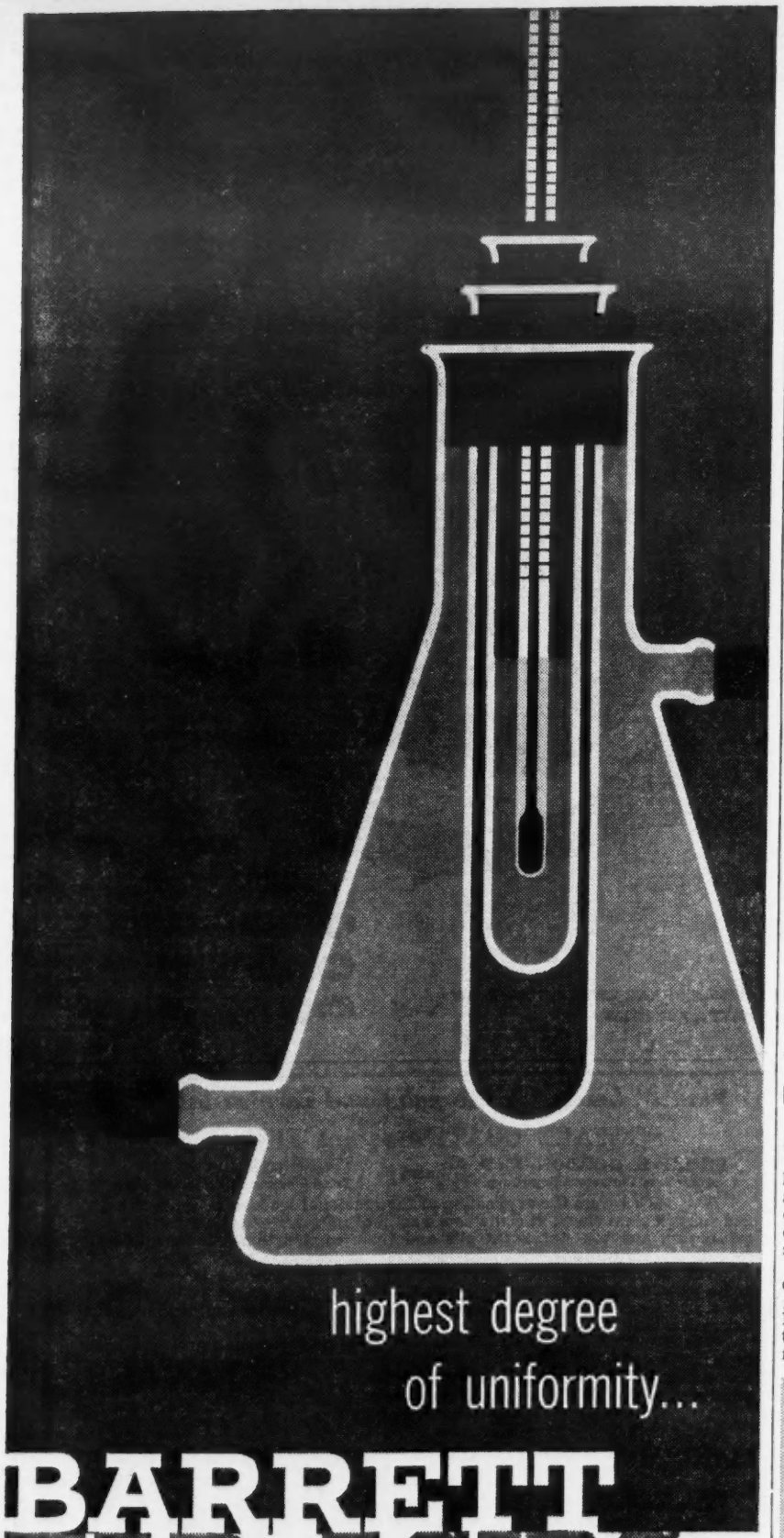


# Coal Chemicals

Tone of this market was generally unchanged last week at the slackened pace that has characterized trade in most coal chemicals over the past two to three months. Benzene and xylene were moving less freely but were still in good balance. Toluene was weak. Naphthalene was going begging, with producers' stocks of crude as of the end of February nearly ten times as great as they were a year earlier. The weak position of naphthalene reflected relatively sluggish trade in phthalic anhydride. Creosote was off. On the brighter side, styrene monomer was still showing vigor, and natural phenol has picked up strength.

2,6-Di-tert-butyl-p-cresol's market has been stabilized after a hectic year and more. There was first a very rapid increase in demand and a substantial price increase, then an acute shortage, then a sharp increase in production and producers' stocks. The effect by late 1956 was a chaotically unsettled market. Production and stocks have now been brought into balance with demand and price, and the current market featured brisk trade in rather heavy volume, with price and availability of supplies steady.

Resorcinol was moving in much better volume, due, largely, to heavy demand for a waterproof resorcinol adhesive widely used in manufacture of corrugated paper box.

6-tert-Butyl-m-cresol and catechol were traded in steady but limited volume, consumption being based largely on diverse uses in chemical syntheses. Certain perfumes were absorbing a fair supply of 6-tert-butyl-m-cresol in their manufacture, as well.

American Iron and Steel Institute estimated that steel production in the week ended April 14 would amount to 91.0 percent of theoretical capacity, equivalent to 2,328,000 net tons of steel. Output of steel was 2,319,000 net tons in the week previous, 2,401,000 net tons in the comparable week one month ago and 2,483,000 net ton in the corresponding week a year ago.

### Price Trends

**Advanced**
None.

**Reduced**
None.

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 118.20 | *118.20 | 118.32 | 115.01 |

* Revised.

*For Current Prices See Page 9*

## Basic Products

**Benzene**—Demand continued slow by comparison with that of fourth quarter 1956 but was still sufficient to support a healthy market. Supply was everywhere adequate, though cokeoven output has dropped off with the decline in steel production, amounting to nearly 10 percent since the turn of the year.

Bureau of Mines reported sales of cokeoven benzene of all grades except motor grade amounted to 14,592,875 gallons in February of this year, compared to 17,422,165 gallons, the corresponding figure for February, 1956. Aggregate sales figures for the first two calendar months were 29,499,251 gallons this year, 31,032,903 gallons last year.

Producers' stocks of cokeoven benzene, excluding motor grade benzene, were 7,890,340 gallons at the end of February of this year, compared to stocks of 7,627,016 gallons as of the end of February, 1956.

**Creosote Oil**—On the basis of 100 percent creosote content in solution and as straight distillate, sales during February were reported by the Bureau of Mines to have been 1,955,644 gallons, bringing the total for the first two calendar months of this year to 2,800,081 gallons. By comparison, sales were 2,101,485 gallons in February a year ago, 3,457,483 gallons in the first two months in 1956.

Producers' stocks of straight distillate, basis of 100 percent creosote content, were 880,680 gallons at the end of February, 1957, compared to 1,031,792 gallons on hand at the beginning of that month and 1,687,844 gallons on hand at the end of February, 1956.

Creosote-coaltar solution at producers' plants, without regard to creosote content, was 169,288 gallons at the end of February of this year, 194,288 gallons as of the beginning of that month and 256,877 gallons at the end of February, 1956.

**Toluene**—Sales of cokeoven material during February last amounted to 2,979,861 gallons, the Bureau of Mines reported, compared to sale of 3,110,218 gallons in the same month a year ago. Aggregate sales for the first two calendar months were 6,048,447 gallons this year and 5,923,002 gallons last year.

Producers' stocks were 3,751,142 gallons at the end of February of this year, 3,675,688 gallons at the beginning of the same month and 3,184,948 gallons at the end of February, 1956.

**Xylene**—Bureau of Mines reported sales

### Aromatic Chemicals Output: January

Following are statistics based on data compiled by the Tariff Commission relating to production of certain aromatic chemicals during January and the month previous, with the commission's revised, preliminary totals for 1956. Figures representing cokeoven production of benzene, creosote oil, crude naphthalene and toluene are those previously published with other figures reported by the Bureau of Mines. Where no figure is given, it is because available data would have disclosed confidential information or because the data on hand were believed to be incomplete. Dyes are indentified by color index or prototype number.

| | *January* 1957 | *December* 1956 | *Total Year* 1956 |
|---|---|---|---|
| Acetanilide, tech. and USP ..... lbs. | ..... | 259,475 | 2,921,696 |
| Aniline ..... lbs. | 8,800,957 | 10,090,052 | 125,233,736 |
| Benzene, tar distillers ..... gals. | 3,247,016 | 3,663,668 | 35,786,659 |
| Cokeoven operators ..... gals. | 16,693,195 | 17,767,486 | 178,859,679 |
| Total from coal sources ..... gals. | 19,940,211 | 21,431,154 | 214,646,338 |
| Petroleum operators ..... gals. | 9,648,931 | 9,941,257 | 113,569,508 |
| Total from all sources ..... gals. | 29,589,142 | 31,372,411 | 328,215,846 |
| Creosote oil (100 percent creosote basis) | | | |
| Tar distillers ..... gals. | 7,070,847 | 10,822,073 | 96,983,152 |
| Cokeoven operators ..... gals. | 907,366 | 3,633,548 | 28,045,189 |
| Total ..... gals. | 7,978,213 | 14,455,621 | 125,028,341 |
| Cresols, meta-para ..... lbs. | 1,440,159 | 1,505,948 | 15,364,846 |
| Ortho-meta-para ..... lbs. | 1,279,598 | 788,029 | 12,106,596 |
| Cresylic Acid, refined, all sources ..... lbs. | 4,154,440 | 3,870,280 | 58,918,753 |
| Dyes, C. I. 202, chrome blue black R..... lbs. | 81,168 | ..... | 648,096 |
| C. I. 581, direct black EW ..... lbs. | 431,646 | 869,575 | 5,172,441 |
| P. 302, naphthol AS ..... lbs. | 57,383 | ..... | 1,028,924 |
| Monochlorobenzene ..... lbs. | 31,080,357 | 38,156,617 | 445,304,766 |
| Naphthalene, crude, tar distillers ..... lbs. | 21,349,325 | 22,676,413 | 292,186,038 |
| Cokeoven operators ..... lbs. | 16,241,076 | 17,504,444 | 179,804,232 |
| Total crude ..... lbs. | 37,590,401 | 40,180,857 | 471,990,270 |
| Refined tar distillers ..... lbs. | 6,709,629 | 6,544,234 | 79,671,686 |
| Phenol, tech. and USP, all sources ..... lbs | *44,195,997 | 45,462,665 | 517,487,709 |
| Phthalic Anhydride ..... lbs. | 25,561,074 | 27,092,559 | 315,492,092 |
| Styrene, from all plants ..... lbs. | 98,070,081 | 100,148,201 | 1,114,348,159 |
| Toluene, cokeoven operators..... gals. | 3,325,968 | 3,487,373 | 37,163,656 |
| From other sources ..... gals. | 16,241,704 | 13,964,743 | 139,417,353 |
| Total from all sources ..... gals. | 19,567,672 | 17,452,116 | 176,581,009 |
| Xylene, from all sources ..... gals. | 11,602,623 | 12,249,014 | 128,034,149 |

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# Coal Chemicals

of 775,677 gallons of cokeoven xylene in February, compared to sale of 827,787 gallons in the same month in 1956. Aggregate sales over the first two months of the calendar years were 1,750,590 gallons this year, 1,711,007 gallons last year.

Producers' stocks were 769,140 gallons at the end of February of this year, 706,379 gallons at the end of January of this year, 866,589 gallons as of the end of February, 1956.

## Intermediates

**2,6-Di-tert-Butyl-p-cresol**—This market has been stabilized at a rather high volume level after a number of abrupt changes. There was a very rapid increase in demand about a year ago, a substantial price advance, a severe shortage that lasted for some months last summer and fall, then a rapid leveling off of demand and a sharp increase in production and supplies. The effect was a markedly unsettled market late in 1956. More recently, production and supplies have come into better focus with price and demand, and the market has steadied.

**Resorcinol**—Trade in this intermediate was by now very much heavier than it was a year or so ago. Strong demand was based on manufacture of a waterproof resorcinol adhesive popularly used in production of corrugated paper box. Long established uses in pharmaceuticals and other end products were sustaining steady volume of resourcinol consumption. Production quotas have been expanded to meet larger demand, and supplies were generally adequate. Prices of long standing were regarded as firm and not likely to change in the months immediately ahead.

### Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending April 14 was as follows:

| | | |
|---|---|---|
| Ammonia liquor | lbs. | 906,348 |
| Ammonium sulfate | lbs. | 38,592,874 |
| Benzene | gals. | 3,449,969 |
| Coaltar | gals. | 16,957,475 |
| Creosote | gals. | 657,833 |
| Naphthalene, crude | lbs. | 3,669,247 |
| Pyridine (2°C) | lbs. | 13,157 |
| Toluene | gals. | 760,163 |
| Xylene | gals. | 219,278 |


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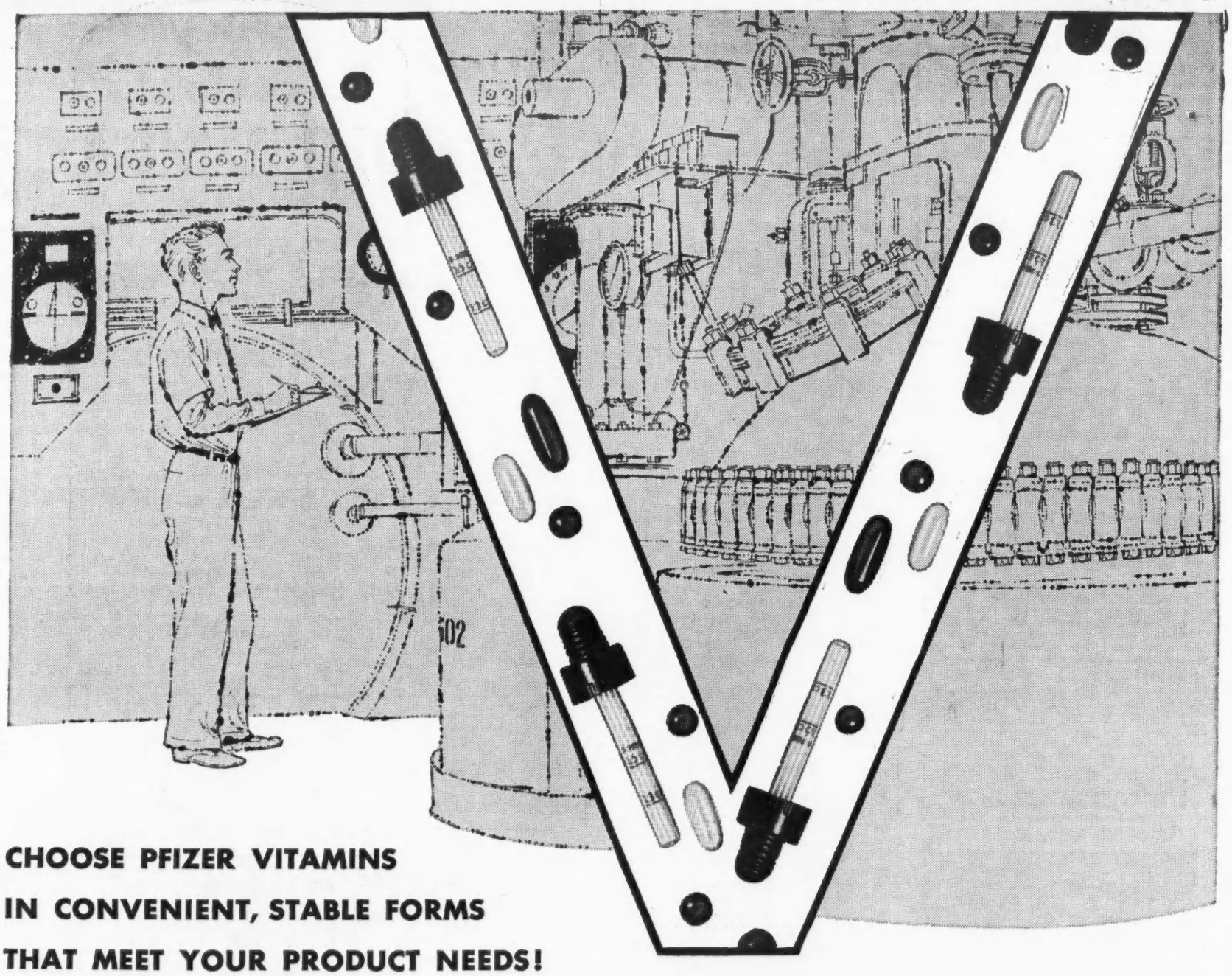

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# Drugs, Fine Chemicals

Price schedules of major producers of gelatin were complete last week after the advances of two weeks ago. Most segments in the industry were agreed that the advances were of from 1 to 4 cents per pound. Higher grades not listed in OPD were increased as much as 5 cents per pound. A producer continued to quote Bloom test 75 and 150 material at 57c. and 66c. respectively, but it was generally agreed that the price would be 53c. for 75 Bloom test (unchanged) and 65c. for the 150 (advance of 2 cents). Makers reported that in many cases they were attempting to absorb part of the increased costs of raw materials which they have experienced in recent months.

Monobromated camphor was moving in routine business volume at prices which reflect the increase in bromides early this year. There was no change in major producers prices on powdered and tablet forms of USP camphor. Imports from Taiwan in recent months have depressed the domestic market somewhat since the first of the year.

Drench forms of phenothiazine continued to find good trade acceptance in the feed industry. Used with a wetting agent, this material was said to have been used very effectively in feed for cattle and hogs. Prices are unchanged since the advance of some weeks ago by major producers.

Pilot plant quantities of b-carotene are being made by a major vitamin producing firm which would utilize acetone as a starting material in place of the presently used lemongrass oil. It was said that shortages of the latter material brought about by the vagaries of nature have been a source of worry in the past to producers of synthetic carotenoids.

A major producer of Salk vaccine announced that fifty-five million doses of polio vaccine will probably be turned out in the first six months of the current year, nine million doses more than were produced by the firm in all of 1956.

Menthol continues to move in routine volume with sales in recent months said to have been depressed somewhat from the good levels attained at the close of 1956 and in the early weeks of 1957.

**N-Acetyl p-Aminophenol**—Needs in the trade were steady at a low volume. Supplies were adequate and producers continued to list this material in a price range of $1.75 to $1.84 per pound. Unsettled trade conditions have caused producers to curtail production efforts to some extent in this market.

**Amino Acids**—Producers reported pharmaceutical users showing increasing interest in the essential amino acids which cannot be synthesized in sufficient amounts in the body. There was said to be increasing use of lysine in the fortification of wheat and baked goods. It was pointed out that should the idea of fortification of food products with a number of essential amino acids come to be accepted practice, production on a large scale would be required since relatively large amounts of these nutrients should be added to foods in comparison with the vitamins which need to be added only in micro-quantities.

**Antibiotics**—Market was firm for penicillin and strep and DHS. Supplies were good and trade needs normal for the season it was said. The recent synthesis of penicillin V was said to have added a valuable adjunct to chemotherapy in that the latter material may be used to treat cases in which patients have exhibited allergies to fermentation penicillin. Also, it was pointed out, the new products would bring resistant strains under fire. No price changes were noted in the antibiotics market. Export business was continuing at a good pace, it was said.

**Calcium Phosphate**—Production of dibasic salt in January totaled 13,663 pounds as compared to 14,764 pounds during a comparable period last year. Stocks at producing plants at the close of January totaled 7,823 pounds and at the end of the previous month, 9,495 pounds. Price was unchanged on USP material and trade needs were routine.

**Camphor**—Trade sources indicated that the expected advances noted in monobromated camphor reflect the rises in most of the bromides effected early this year. Dealers quoted prices ranging from $3.68 to $3.70. Natural and synthetic camphor was unchanged, both powder and tablet form. Sales volume of tablet forms was said to compare very favorably with last year while the powder was somewhat off as a result of imports from Taiwan which have appeared on the market at prices slightly under those of domestic makers.

### Price Trends

**Advanced**
None.
**Reduced**
None.
**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 65.27 | 65.27 | 65.27 | 65.84 |

*For Current Prices See Page 9*

**Chloral Hydrate**—Needs were characterized as routine and supplies quite ample for the modest needs which characterize the trade at this time. USP material in 1,000 pound lots was available from major producers priced at $1 per pound while 500 pound lots were listed at $1.03 and 100 pound lots or less at $1.05. Domestic producers reported continued operations under the pressure of imports.

**Choline Salts**—No changes were noted for choline salts from last reports so far as price is concerned. Demands continued in a routine fashion with stocks at producing plants said to be ample for consumer needs. Preference in the feed trade continued to be for choline chloride priced at $1.25 per pound.

**Gelatin**—The market was strong over the first quarter, according to trade sources. Producers indicated that the past two months have shown a good increase in business volume on most gelatin grades and that production facilities were able to handle the substantial demands being made. One producer reported supplies tightening somewhat on spot. All major factors had advanced prices and all were agreed that raw materials costs was the determining factor in the increase. Advances ranged from 1c. to 4c., depending on Bloom test strength, and up to 5c. on some of the higher grades not listed in OPD. One maker asserted that some grades warranted increases of as much as 8c., but that costs were being absorbed by the producer when at all possible. Low Bloom test gelatin was the least effected by the changes while higher grades were raised 5c. with the average being 2c. per pound. Changes are the first since last July. A producer reported Bloom test 75 material had been increased 4c. to 57c. per pound, but all other makers reported this grade unchanged at 53c. All other changes were uniform throughout the industry.

Total gelatin production in February was 4,933,000 pounds as against 5,004,000 pounds in January and 4,774,000 pounds in February, 1956. Total shipments in February were 4,776,000 pounds as compared to 4,950,000 pounds in January and 4,672,000 in February of last year. Stocks on hand at producing plants in February were 13,871,000 pounds, 13,714,000 in January and 12,782,000 in February, 1956.

Production of gelatin for edible and pharmaceutical purposes shows a combined increase, in February, of 189,000 pounds over January figures, while production of technical and photographic declined by 260,000 pounds. Production of the latter materials in February of this year compare very favorably with February of last year and shipments of technical material this February are 185,000 pounds ahead of the comparable period last year.

**Menthol**—Dealers quoted offerings of Brazilian at $6.25 per pound to $6.50 while Japanese was quoted ranging from $7.25 to $7.45 per pound. Reports of Brazilian menthol going for $6.15 were unsubstantiated by trade sources queried. A pickup in sales was to be anticipated, observers said, after the slack buying in recent weeks.

**PAS**—Acid, sodium and calcium salt were listed by domestic producers at prices of long standing in the trade. Government contracts to domestic makers were expected to provide a lift in this market. It was again pointed out that


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## Drugs, Fine Chemicals

PAS when used with other tuberculosis drugs such as streptomycin or isoniazid lessens severity of side effects.

**Phenothiazine**—NF materal was moving in good business colume while drench phenothiazine for the feed industry was finding good trade acceptance. Prices were unchanged after the advance by major producers last month. The latter material in truckload quantities was priced at 44c. per pound while less than truckloads were 47c. NF phenothiazine was priced at 43c. per pound in truckloads and less than truckloads were 46c.

**Salicylates**—Consumer inquiry has been at a normal pace for the past two weeks after the heavy demands on producers, reported in the early part of last month. A normal slackening of interest was expected with the coming of warmer weather and cutbacks in production, by pharmaceutical makers, of analgesic and cold preparations.

**Silver Salts**—Prices on cyanide and nitrate remain unchanged reflecting the stable price position of silver bullion. In January, 1957, 6,232 ounces of silver nitrate were produced as against a December figure of 6,469 and production of 5,549 ounces in January, 1956. January 31, 1957, inventories at producing plants were 3,708 ounces as compared to 3,786 ounces for December 31, 1956.

**Sodium Sulfate**—NF dried powder and USP crystalline and granular forms were unchanged in price. Production of anhydrous refined sodium sulfate in January was 24,840 pounds as compared to 24,806 pounds in January, 1956. Stocks at producing plants at the end of January were 3,047 pounds while at the end of December stocks were 4,683.

**Sulfonamides**—A leading producer estimates that retail sales this year should account for some $40 million, the highest in the twenty year history of sulfa chemotheraphy. Trade sources continued to emphasize the value of new members of the sulfa family and combined sulfas which have been shown to be more effective, less toxic and more specific in action than the original drugs introduced during World War II. The newest antibacterial sulfa, sulfamethoxypyridazine, is said to provide prolonged blood levels with one-fourth the normal sulfonamide drug dose. It was pointed out that over 300 different dosage forms of sulfonamides are on the market, serving to indicate the degree of specificity of action which sulfonamides have attained.

**Thymol**—USP material was freely offered priced at $2.60 per pound and ranging to $3. The market was said to have been easier in recent weeks. Dealers indicated that consumers were not forcing the pace and that a substantial portion of the trade was operating on a hand to mouth basis. Stocks were plentiful.

**Vitamins**—Last development pricewise in this market was the $2.50 per kilo reduction in the price of niacinamide. Demands continued to be seasonally normal according to major producers. Stocks were ample. Pyridoxine, the other major B-complex vitamin to show a reduction in price this year was said to be in continued good demand. Imports of ascorbic acid and thiamin were at a minimum compared to early last year so far as could be ascertained.

## Botanicals

Shipments of water soluble gums from foreign sources were said to have come up to expectations according to dealers in the trade last week. There was continuing good interest reported for locust bean gum after the reports early in the year that crops had suffered from severe weather conditions and were partially ruined. Stocks were ample at the present time but there were continuing indications that shortages could develop in the coming months. Arabic continued to move in routine business volume as was the case with tragacanth and the various grades of karaya.

Dealers reported more shipping difficulties in papain and supplies were spotty with some sources noting spot material available and others reporting a tightening market.

**Agar**—Dealers quoted USP No. 1 at $2 per pound, the price which has been prevalent in the trade for several weeks. Material was moving to consumer channels at a seasonally normal pace and supplies were ample for the present needs of the trade. Powder was 50c. more per pound. Prices have been unchanged since the reduction of 20c. to 30c. inaugurated in the early part of the year.

**Gums**—Dealers reported routine interest in the water soluble gum line. Prices were quotably unchanged and new crop offerings were said to have come up to expectations in most quarters. Consumers have shown good interest in arabic and locust bean as well as the various grades of tragacanth. The latter continues to move in moderate volume at the high price levels quoted by dealers for several months. Good trade interest was noted for recent shipments of olibanum and myrrh.

**Papin**—Dealers were again reportedly suffering shipping problems which caused a tightening of supplies on the spot market according to some sources. In other quarters material was offered but at the high prices prevailing in the trade for the past several weeks. Business was steady with sellers appearing not overanxious to force the pace.


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## 'CBR' Warfare Is Viewed as Critical Problem

—Continued from page 4

would be relatively undisturbed, Gen. Rothschild indicated.

The General pointed out that the mission of the Chemical Corps is to perform the research and development necessary to give the United States a capability to defend itself, by retaliation with similar weapons, if necessary.

The speaker praised the chemical industry for its part in the research and development necessary to the creation of such defenses, but pointed out that it is in the industrial liaison are (the search for and collection of useful information and compounds) where there is room for improvement in the cooperative efforts between the chemical industry and the Chemical Corps.

Gen. Rothschild stated that the Chemical Corps is now embarking on an extended program of cooperative activity which will result in gains leading to mutual benefits.

**Program Covers Three Areas**

"This program embraces three distinct areas of cooperation," he said, "the first two of which have been utilized extensively. They are:

"First, the contracting of many special problems to industry, institutions, and private research organization.

"Second, contact with outstanding leaders of science in industry who are available, on call, for consulting or advisory services and,

"Thirdly, an industrial liaison program with emphasis placed mainly on the collection of information and chemical compounds of a toxic and therapeutic nature in order to increase the corps' knowledge of mechanism of action of such chemicals and provide adequate treatment of toxicological casualties."

At the present time, the General pointed out, some 270 of our nation's industrial and academic chemical laboratories actively participate in the research program by sending in data regarding compounds which may be useful to the corps.

It is anticipated that by July, 1957, this figure will be about 350. Eventually, it is hoped, the Chemical Corps will have enlisted the aid of the nation's 3,000 industrial research laboratories.

Of special interest to the industry, he pointed out, are the steps taken by the corps to safeguard the security of the information volunteered.

The voluntary participation of the American chemical industry in this program is of inestimable value to the nation's security, not only in strengthening the defense program, but also in saving the taxpayers' dollars, Gen. Rothschild said.

## Potash Land

—Continued from page 4

deposits elsewhere since the reserve was created.

Interior department experts estimate that potash reserves today are about twice as great as those contained in the blocked out area established by the 1939 executive order. These discoveries have been made since issuance of permits was resumed in 1945 and have resulted in enlargement of the known reserves in New Mexico and discovery of a new source in Utah.

Mr. Woozley said that modification of the reserve to provide for competitive leasing will be in the interest of conservation as the area should be mined while facilities are available for development and refining. He pointed out that [illegible] such operations in the immediate area insure competitive bidding.

The released area is estimated to contain 17.4 million tons of potash ore with a gross value of $100 million, based on current market prices. It is estimated that about 13 million tons are recoverable through present development processes.

Because of the indicated uniform potassium chloride content, the department said that development and recovery of the ore from the released area will be feasible for nearby refineries using mixed ores or for an integrated concern in need of a supply of potassium chloride.

Conditions for leasing the released land and other details will be announced in a future notice, Mr. Woozley said.


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10 dms, Freedman & Slater, Yokohama
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BARBASCO ROOT—146 bls, Marine Midland Trust Co, Callao
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BEEF EXTRACT—373 cs, Tupman Thurlow, Montevideo
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BEESWAX—26 bgs, Machado & Co, Ciudad Trujillo
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12 hf cs, Grace National Bank, Messina
156 hf cs, Messina
BISMUTH—145 cs, Cerro de Pasco Corp, Callao
BLANC FIXE—1,000 bgs, C J Osborn Co, Rotterdam
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375 bgs, Tampico
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100 bgs, Spartan Trading Corp, Rotterdam
200 bgs, P H Petry, Rotterdam
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CARNAUBA WAX—357 bgs, River Plate Corp, Natal
167 bgs, National City Bank, Fortaleza
375 bgs, M Argueso & Co, Parnahiba
251 bgs, Cornelius Wax Refining, Parnahiba
167 bgs, Frank B Ross, Areia Branca
188 bgs, River Plate Corp, Parnahiba
188 bgs, Frank B Ross, Parnahiba
250 bgs, Chemical Bank, Parnahiba
250 bgs, M Argueso & Co, Sao Luiz Maranhao
1,189 bgs, F Henjes, Parnahiba
376 bgs, Biddle Sawyer Corp, Parnahiba
361 bgs, Frank B Ross, Fortaleza
313 bgs, M Argueso & Co, Fortaleza
357 bgs, Cornelius Wax Refining, Fortaleza
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56 bgs, River Plate Corp, Fortaleza
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CASEIN—2,000 bgs, L N White & Co, Buenos Aires
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COPAIBA BALSAM—28 dms, Meer Corp, Manaus
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CRESYLIC ACID—29 tons, H A Gogarty, London
541 dms, H A Gogarty, Liverpool
DAMMAR GUM—42 bgs, Wm H Scheel, Singapore
[illegible] bgs, O G Innes Corp, Bangkok
[illegible] Midland Corp, Bangkok
50 cs, Archer Daniels [illegible]
DEXTRIN—435 bgs, Stein Hall & Co, Rotterdam
300 bgs, Paisley Products, Rotterdam
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240 bgs, Naftone Inc, Rotterdam
457 bgs, Reichard Coulston, Larnaca
ERGOSTEROL—4 cs, H J Jensen, Rotterdam
EUCALYPTUS OIL—10 dms, Lo Curto & Funk, Kobe
FENUGREEK SEED—56 bgs, Wm E Martin & Sons, Karachi
FERRIC SULFATE—25 dms, Hudson Shipping Co, Liverpool
FISHLIVER OIL—3 dms, Arista Oil Products Co, Yokohama
11 dms, Interocean Chemical & Minerals Corp, Yokohama
5 dms, Mitsubishi International Corp, Yokohama
17 dms, J D Smith Interocean, Yokohama
6 dms, Robbins Forwarding Co, Ponta Delgada
FUEL OIL—45,596 bbls, Royal Petroleum Corp, Punta Cardon
359,349 bbls, Esso Export Corp, Las Piedras
448,070 bbls, Esso Standard Oil Co, Aruba
109,378 bbls, Industries Terminal, San Lorenzo
123,704 bbls, Hess Inc, Punta Cardon
102,887 bbls, Paragon Oil Co, Punta Cardon
10,000 bbls, Asiatic Petroleum Corp, Curacao
189,255 bbls, Esso Standard Oil Co, Las Piedras
103,360 bbls, Paragon Oil Co, Tampico
GAMMA ACID—6 dms, Berkshire Color & Chemical Manufacturing Corp, Genoa
GARLIC OIL—1 cs, Helenor Trading Co, Genoa
1 cs, Magnus Mabee & Reynard, Genoa
GELATIN—300 bgs, Transatlantic Animal By-Products Corp, Rotterdam
30 dms, Hensel Bruckmann & Lorbacher, Rotterdam
300 bgs, Transatlantic Animal By-Products Corp, Bremen
200 bgs, B Young & Co, London
10 cs, Commercial State Bank, London
200 bgs, T M Duche & Sons, Antwerp
GHATTI GUM—256 bgs, Dingelstedt & Co, Bombay
GINGER—240 bgs, Virchand Panachand, Cochin
240 bgs, C Czarinkow, Cochin
558 bgs, Murwal Inc, Lagos
448 bgs, Apapa
GLUE—153 cks, M Corbett & Co, Marseille
GLYCERINE—100 tons, International Packers Ltd, Buenos Aires
83 dms, R P Casado, Havana
80 dms, L Pasternak & Co, Genoa
GRAPHITE—1,200 bgs, Asbury Graphite Mills, Bremen
250 bgs, Asbury Graphite Mills, Colombo
750 bgs, Asbury Graphite Mills, Hong Kong
GUAR GUM—300 bgs, Heemsoth Kerner, Rotterdam
200 bgs, Morningstar Nicol, Rotterdam
GYPSUM, CRUDE—20,211 tons, U S Gypsum Co, Hantsport
HALIBUT LIVER OIL—2 dms, Arista Oil Products Co, Halifax
IODINE, CRUDE—472 kgs, Chilean Nitrate Sales Corp, Tocopilla
600 kgs, Chilean Nitrate Sales Corp, Antofagasta
IPECAC ROOT—8 bgs, R S Arbiv, Arica
IRON BLUE—70 dms, Van Oppen & Co, Liverpool
J ACID—49 dms, Atlantic Chemical Corp, Genoa
JABORANDI LEAVES—24 bls, International Expediters, Parnahiba
KARAYA GUM—374 bgs, Stein Hall & Co, Bombay
307 bgs, Jacques Wolf & Co, Bombay
366 bgs, Morningstar Nicol, Bombay
LACTIC ACID—20 dms, Kolon Trading Co, Hamburg
LECITHIN—1 cs, P. J. Stevens, Bremen
LEMON OIL—9 dms, Lo Curto & Funk, Buenos Aires
10 hf cs, Messina
LIME OIL—4 dms, George Uhe Co, Vera Cruz
7 dms, Fritzsche Bros, Vera Cruz
16 dms, Lo Curto & Funk, Vera Cruz
1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
LITHARGE—326 dms, Eagle Picher Co, Tampico
LIVER CONCENTRATE—17 dms, Wilson & Co, Buenos Aires
1 dm, Tec Chemical Corp, Montevideo
LIVERMEAL—1,549 bgs, Ovimpex Inc, Buenos Aires
LOCUST BEANS—240 bgs, Meer Corp, Larnaca
LOCUST BEAN GUM—200 bgs, Morningstar Nicol, Genoa
300 bgs, J L Quesada, Barcelona
20 bgs, Duvekot & Co, Genoa
124 bgs, Stein Hall & Co, Genoa
25 cks, Uni Gum Corp, Rotterdam
LOCUST BEAN GUM—200 bgs, Colony Import & Export Corp, Rotterdam
100 bgs, Jacques Wolf & Co, Rotterdam
LYCOPODIUM—3 kgs, Meer Corp, London
MACE—4 cs, Kingstown
MAGNESITE—1,000 bgs, Hudson Shipping Co, Trieste
MALALEUCA OIL—3 dms, Sydney
MALONIC ACID—1 dm, Interstate Chemical Corp, Bremen
MANGANESE ORE—560 bgs, National Carbon Co, London
MENTHOL—250 cs, Schwabach & Co, Santos
MERCURY—60 flks, Lo Curto & Funk, Tampico
50 flks, Vera Cruz
METALLIC SODIUM—3 cs, Foundry Services Inc, London
MOLASSES—9,224 tons, Southwestern Sugar & Molasses Co, Bridgetown
555 tons, W R Grace & Co, Salaverry
MONOSODIUM GLUTAMATE—200 dms, Ajinomoto Co of N Y, Yokohama
MONTAN WAX—70 bgs, Cornelius Wax Refining [illegible] Rotterdam
[illegible] bgs, Ham[illegible]mond & Carpenter, Calcutta
MYROBALANS—[illegible]
NAPHTHOL—4 dms, Arondy Corp, Rotterdam
NUTMEG—125 bgs, East India Trading Co, Rotterdam
125 bgs, George Lueders & Co, Rotterdam
125 bgs, Dodge & Olcott, Rotterdam
100 bgs, Shippers Produce Corp, Grenada
100 bgs, East India Trading Co, Grenada
207 bgs, Rotterdam
22 bgs, Kingstown
OITICICA OIL—640 tons, Brazilian Oiticica Inc, Fortaleza
OJEFICIN POWDER—3 dms, Astoria Panamericana, Iquitos
OLIVE OIL—50 dms, Leghorn Trading Co, Marseille
25 dms, V Formusa Co, Marseille
35 dms, De Simone Bros, Marseille
50 dms, B Filippone & Co, Marseille
53 dms, Unanue & Sons, Buenos Aires
ORANGE OIL—2 cs, Ungerer & Co, Dominica
2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
ORANGE PEEL—15 bls, Heublein Inc, Genoa
OURICURY WAX—834 bgs, Bahia Ceras Products, Salvador
PAPRIKA—400 bgs, Wm E Martin & Sons, Istanbul
100 bgs, Bankers Trust Co, Rijeka
150 bgs, Albo Co, Trieste
500 bgs, Rijeka
PATCHOULI OIL—20 cs, Polarome Manufacturing Co, Singapore
40 cs, Antoine Chiris, Singapore
PEATMOSS—2,000 bls, J E Bernard, Rotterdam
2,480 bls, C Gastmeyer, Rotterdam
1,000 bls, J E Bernard, Hamburg
PEPPER, BLACK—80 bgs, Mutual Spice Co, Mangalore
64 bgs, C Czarinkow, Mangalore
460 bgs, J F Frank, Singapore
70 bgs, Borneo Sumatra Trading Co, Singapore
240 bgs, Calvert Vavasseur, Cochin
80 bgs, East India Trading Co, Cochin
360 bgs, Mincing Trading Corp, Cochin
RED—100 bgs, Virchand Panachand, Yokohama
200 bgs, P H Petry, Yokohama
200 bls, Yokohama
WHITE—70 bgs, A G Dunn, Singapore
PETITGRAIN OIL—9 dms, Hollander Trading Corp, Buenos Aires
44 dms, C Tennant Sons & Co, Buenos Aires
PHENOTHIAZINE—3 dms, Pulverizing Machinery Division, Liverpool
PHENYL ISOGAMMA ACID—10 dms, Atlantic Chemical Corp, Genoa
PINENEEDLE OIL—17 dms, Magnus Mabee & Reynard, Hamburg
POLLACKLIVER OIL—50 dms, National City Bank, Yokohama
50 dms, Chase Manhattan Bank, Yokohama
75 dms, Arista Oil Products Co, Yokohama
50 dms, Peder Devold Oil Co, Yokohama
25 dms, J D Smith Interocean, Yokohama
POLYVINYL CHLORIDE—10 bgs, A Kawai, Yokohama
POPPY SEED—167 bgs, Levy & Levis Co, Gdynia
167 bgs, C M Van Sillevoldt, Gdynia
167 bgs, Joel Bieler, Gdynia
166 bgs, Louis Furth, Gdynia
166 bgs, Bankers Trust Co, Gdynia
500 bgs, Louis Furth, Rotterdam
POTASSIUM FERROCYANIDE—1,000 bgs, Haras Co, Rotterdam
POTASSIUM PERCHLORATE—100 dms, C Hardy, Havre
POTASSIUM PERMANGANATE—34 dms, Henley & Co, London
PYRITES—432 cks, American Metal Co, Leixoes
QUEBRACHO EXTRACT—1,723 bgs, International Products Corp, Buenos Aires
1,615 bgs, Buenos Aires
R SALT—18 dms, Wilson Export & Import Corp, Genoa
RAPESEED—1,100 bgs, Hartz Mountain Products, Rotterdam
RHODAMINE—6 dms, Arondy Corp, Rotterdam
RICE STARCH—134 bgs, American Key Products, Bremen
160 bgs, Stein Hall & Co, Bremen
230 bgs, Aurora Manufacturing Co, Trieste
ROSEWOOD OIL—5 dms, R S Arbib, Iquitos
3 dms, Lo Curto & Funk, Iquitos
RUTILE SAND—2,000 bgs, International Titanium Corp, Brisbane
RUTIN—18 dms, Commercial Banking Co of Sydney, Melbourne
18 dms, National City Bank, Sydney
SAFFLOWER—6 bgs, F D Keller & Son, Vera Cruz
SAFFRON—9 cs, Calderon & Co, Leixoes
4 cs, Frank Tea & Spice Co, Leixoes
SAGE LEAVES—2 bls, Heublein Inc, Genoa
11 cs, Vermouth Industries of America, Genoa
SAGO FLOUR—571 bgs, Singapore
SANDALWOOD—100 bgs, George Lueders & Co, Bombay
SANDALWOOD OIL—7 cs, Agriscent Corp, Bombay
SAPONINE—9 dms, Karr Ellis & Co, Liverpool
SEEDLAC—700 bgs, Wm Zinsser & Co, Calcutta
250 bgs, Chase Manhattan Bank, Bangkok
1,500 bgs, Wah Chang Corp, Bangkok
500 bgs, Sino Java Inc, Bangkok
750 bgs, Bankers Trust Co, Bangkok
500 bgs, United Shellac Corp, Bangkok
750 bgs, Gillespie Rogers Pyatt, Bangkok
250 bgs, National City Bank, Bangkok
500 bgs, East Asiatic Co, Bangkok
1,000 bgs, Bangkok
SENNA CONCENTRATE—12 cs, Bank of Pharmaceuticals Inc, London
SESAME OIL—24 cs, Chase Manhattan Bank, Yokohama
SHARKLIVER OIL—10 dms, Silmo Chemical Corp, Yokohama
50 dms, Interocean Chemical & Minerals Corp, Yokohama
SHELLAC—100 bgs, Haeuser Shellac Co, Calcutta
250 bgs, C H Timm, Calcutta
1,260 bgs, Wm Zinsser & Co, Calcutta
100 bgs, Mantrose Corp, Calcutta
100 bgs, Gillespie Rogers Pyatt, Calcutta
200 bgs, Ludwig Mueller, Calcutta
20 bgs, P N Rowe, Calcutta
SOAPBARK—193 bls, S B Penick & Co, San Antonio
199 bls, S B Penick & Co, Valparaiso
SODIUM PERBORATE—331 bgs, Philipp Bros Chemicals, Rotterdam
SODIUM PERBORATE TETRAHYDRATE — 1,000 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PHOSPHOCASEINATE—200 bgs, Milwaukee Spice Mills, Rotterdam
SODIUM SILICOFLUORIDE—400 bgs, Riches Nelson, Rotterdam
SULFANILAMIDE—2 cks, Standard International Corp, Liverpool
SULFATHIAZOLE—40 cks, Venice
SWORDFISHLIVER OIL—5 dms, Consumers Import Co, Yokohama
TALC—17,900 bgs, Charles Mathieu, Genoa
TANKAGE—508 bgs, International Packers Ltd, Montevideo
TANNING EXTRACT—16 dms, Geigy Chemical Corp, Bremerhaven
TAPIOCA FLOUR—400 bgs, Morningstar Nicol, Coatzacoalcos
200 bgs, Stein Hall & Co, Coatzacoalcos
London
2,000 bgs, Morningstar Nicol, Itaji
672 bgs, American Key Products, Bangkok
2,248 bgs, Geismar & Co, Bangkok
4,171 bgs, Stein Hall & Co, Bangkok
3,350 bgs, Morningstar Nicol, Bangkok
TEA OF MATTE—176 cs, S B Penick & Co, Paranagua
THEOBROMINE—1 dm, H J Baker & Bro, Liverpool
TRICH[illegible]OROETHYLENE—575 dms, Venice
TRIHYDROXYBENZENE—10 kgs, D F Young, London
[illegible]s, Internatio Rotterdam, Buenos
TUNG [illegible]—93 tons, Buenos Aires
509 tons, Buenos Aires
UMBER—100 bgs, Chase Manhattan Bank, Larnaca
UREA—1,500 bgs, Nylos Trading Co, Genoa
VITAMIN B$_{12}$—2 cs, Taub Hummel & Schnall, Kobe
WHITING—800 bgs, National Brands, London
1,260 bgs, Antwerp
WOOL GREASE—56 dms, N I Malmstrom, Rotterdam
2 dms, James E Fox, Genoa
136 dms, Fanning Chemical Corp, Nagoya
75 dms, Anjul Inc, Kobe
33 dms, National City Bank, Melbourne
106 dms, Chase Manhattan Bank, Melbourne
40 dms, Chemical Bank, Sydney
73 dms, National City Bank, Sydney
150 dms, N I Malmstrom, Liverpool
66 cks, Venice
51 dms, Melbourne
WOOL WAX—40 dms, Alexander & Co, Liverpool
3 dms, Olympic Shipping Co, Liverpool
YACCA GUM—233 bgs, Wm H Scheel, Port Adelaide

## Los Angeles

COPRA CAKE—6,480 bgs, Pacific Vegetable Oil Corp, Manila
4,480 bgs, Balfour Guthrie, Manila
2,000 bgs, Pacific Vegetable Oil Corp, Cebu
6,720 bgs, Procter & Gamble Co, Manila
FISHLIVER OIL—1 dm, Interocean Chemical & Minerals Corp, Nagoya
FISHMEAL—2,174 bgs, Wilbur Ellis Co, Ilo
2,174 bgs, Wilbur Ellis Co, Chimbote
PAPRIKA—50 bgs, B C Ireland, Trieste
350 bgs, Hismoco American Co, Trieste
POLLOCKLIVER OIL—101 dms, Interocean Chemical & Minerals Corp, Yokohama
TAPIOCA FLOUR—2,505 bgs, Stein Hall & Co, Bangkok

## Philadelphia

ASBESTOS FIBER—2,880 bgs, Chas Kurz Co, Lourenco Marques
700 bgs, Phila National Bank, Lourenco Marques
600 bgs, Illinois Glass Co, Lourenco Marques
BONE—1,140 bgs, Ovimpex Inc, Buenos Aires
3,000 bgs, J C Gilent, Calcutta
1,028 bgs, Phila National Bank, Calcutta
FISHLIVER OIL—50 dms, Chase Manhattan Bank, Yokohama
FUEL OIL—126,000 bbls, Esso Export Corp, Aruba
GYPSUM—5,209 tons, U S Gypsum Co, Hantsport
IRON OXIDE—4,415 bgs, American Chemical Pigment Co, Malaga
OSSEINE—430 bgs, Kind & Knox, Antwerp
PEATMOSS—1,300 bls. Keer Maurer, Hamburg
POTASSIUM NITRATE—120 bgs, Vandergrift Co, Bremen
SODIUM NITRATE—1,500 tons, Guaranty Trust Co, Tocopilla
VANILLA BEANS—41 cs, Hamburg
WATTLE BARK—450 bgs, River Plate Corp, Durban

## San Francisco

BONEMEAL—984 tons, Rosario
CALCIUM CHLORIDE—500 bgs, P W Bellingall, Antwerp
CASEIN—200 bgs, J R Spellacy, Buenos Aires
1,000 bgs, P A Dunkel, Buenos Aires
300 bgs, Eugenio Lang, Buenos Aires
100 bgs, Buenos Aires
CLOVE—100 bls, J H Schroder, Zanzibar
100 bls, First National Boston, Zanzibar
COPRA—1,200 tons, Cargill Inc, Cebu
801 tons, Procter & Gamble
CORIANDER SEED—79 bgs, Steinardter & Nordlinger, Buenos Aires
CREOSOTE—437 tons, Bernuth Lembcke, Yokohama
EARTH COLORS—450 bgs, Frank P Dow, Antwerp
GINGER—80 bgs, Kobe
80 bgs, Hongkong
PEPPER, BLACK—720 bgs, Hong Kong
POPPY SEED—100 bgs, Seinardter & Nordlinger, Buenos Aires
QUEBRACHO EXTRACT—3,000 bgs, International Products Corp, Buenos Aires
SESAME OIL—106 dms, Pacific Vegetable Corp, Antwerp
SEED—200 bgs, W R Grace & Co, San Juan del Sur
350 bgs, H M Newhall & Co, San Juan del Sur
200 bgs, B C Ireland, San Juan del Sur
SODIUM BICARBONATE—1,000 bgs, C M C Chemicals, Liverpool
TUNG OIL—100 tons, Bunge Corp, Buenos Aires
UREA, SYNTHETIC—300 bgs, C M C Chemicals, Liverpool

## Bids Wanted

**Ascorbic acid,** 960 bots. of 100 tabs., 240 bots. of 1,000 tabs., inv. A-469, Apr. 18, Vets. Adm., Procurement Div., Supply Service, Dept. of Medicine & Surgery, Washington 25, D.C.

**Desiccant,** 121,800 bgs. of 8 desiccant units per bg., activated, inv. 506, Apr. 19, Purchasing & Contracting Office, Brookley AFB, Ala.

**Drugs,** 12,960 bots. of 100 tabs. alkaline aromatic solution, 7,332 bots. of 500 tabs. Burrow's solution, 3,744 bots. of 100 tabs. dehydrochloric acid, 3,456 bots. of 100 tabs. diethylstilbestrol, 15,840 bots. of 100 tabs. phenobarbital, 20,016 bots. of 100 tabs. potassium permanganate, 840 bots. of 500 tabs. estrogenic substances., inv. 135, Apr. 18, Military Med. Supply Agency, 84 Sands St., Bklyn., N. Y.

**Dye,** 100 lbs. red fuchsine, inv. 24945, Apr. 17, Purchasing Agent, Govern. Printing Office, Washington, D. C.

**Insecticide,** DDT-areosol bombs, as required during period ending October 31, 1957, inv. SFO-8425, Apr. 24, Gen. Services Adm., Business Service Center, Region 9, 49 Fourth St., San Francisco 3, Calif.

**Paint,** phosphorescent, inv. 1930, Apr. 18, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

**Petroleum ether,** 800 bots., inv. A-465, Apr. 22, Vets. Adm., Procurement Div., Supply Service, Dept. of Medicine and Surgery, Washington 25, D. C.

**Phenolphthalein,** 20 ozs. ACS, inv. 323, Apr. 22, Purchasing & Contracting Office, Patrick AFB, Fla.

**Potassium hydroxide,** 5 bots., inv. 323, Apr. 22, Purchasing & Contracting Office, Patrick AFB, Fla.

**Sodium fluoride,** 106,000 lbs., inv. 82, Apr. 22, Contracting Office, N. Y. Chem. Procurement District, New York.

**Sodium phosphate,** 3,200 lbs., inv. 323, Apr. 22, Purchasing & Contracting Office, Patrick AFB, Fla.

**Sodium sulfate,** 10 lbs., inv. 324, Apr. 24, Purchasing & Contracting Office, Patrick AFB, Fla.

**Sodium thiosulfate,** 48,200 lbs., inv. 324, Apr. 24, Purchasing & Contracting Office, Patrick AFB, Fla.

**Sulfuric acid,** 1,125 lbs., inv. 323, Apr. 22, Purchasing & Contracting Office, Patrick AFB, Fla.

## Rutgers Conference

*—Continued from page 7*

Bridgeport, Conn., assistant director of the American College of Apothecaries and third vice-president of the Connecticut Pharmaceutical Association, first of five morning speakers, will talk on "Prescription Facts and Figures."

Wholesale druggist Carl F. G. Meyer, 3rd, president of Meyer Brothers Drug Company, St. Louis, Mo., will tell the conferees that "Profits Speak Louder" and A. J. W. LeBien, vice-president for marketing of Eli Lilly & Co., Indianapolis, Ind., will discuss "Meeting the Challenge of Change."

"New State Legislation of Pharmaceutical Interest" is to be detailed by Frank T. Dierson, associate counsel of the American Pharmaceutical Manufacturers Association.

Sol S. Rabinovitz, of Walgreen Drug Stores, general store operations division executive of Chicago, Ill., will conclude the morning program with an examination of "Methods of Meeting Competitive Trends Affecting the Retail Drug Field."

Dr. Scheele is scheduled to speak following luncheon greetings by Mr. Martini and Dr. Roy A. Bowers, dean of Rutgers University College of Pharmacy.

The Conference afternoon program will consist of a forum and question period in which morning session speakers will answer questions from the audience. Mrs. Teresa C. Dayharsh, of Teaneck, N. J., a member of the New Jersey Pharmaceutical Association Board of Trustees, will serve as panel moderator.

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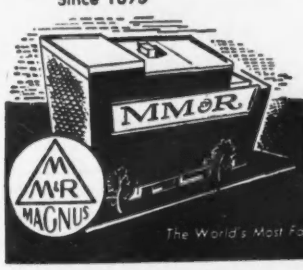


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# Essential Oils, Aromatics

The market on the whole showed little tendency to vary with any definite movement last week though the fibre of seasonal sales strength continued the trend in a positive direction. Geranium oil, the citrus oils and a number of contingent aromatic chemicals led the firming movement. A negative side of the market was reflected in another decline in citronella oil and the continued ease noted through the past months in the safrol bearing oils. The movement in geranium oil, dealers here reported last week, was due to an increase in consumption occurring simultaneously with the drying-up of supplies at source and in the shipping areas. The citrus oils, of course, are climbing on the usual seasonal period sales movement. The high point of the citrus market is the hot weather period and with a few minor exceptions, the material is in slightly short supply with demand growing continuously. The movement in citronella oil (a 5 cents per pound decline in Ceylon quality materal) is nothing new to this area of the essential oils market. The price shift for Ceylon stuff follows on the heels of a Formosan oil decline only the week previous. The oil has been soft n both spot and shipping tone for some months and no shift in direction is expected.

In the aromatic chemicals field a number of price shifts were reported though their movement was not considered by most producers as representative of any particular market trend. Movements noted were a decline in citral, eucalyptol, methyl chavicol and iso-eugenol. The last named decline was resultant, sources said, of the highly competitive conditions existing in the clove leaf oil market; the shift downward in methyl chavicol, according to major producers, was prompted by improvements in the methods of manufacture and other factors, while eucalyptol declined because of competitive conditions.

Conditions in the seeds and spices market remained unchanged in character from those of previous weeks. Nutmegs continued to show a soft tone, a trend that has mysteriously held since the first of the year. Prices moved further down he scale for both qualities of material, while pepper remained indifferent to all activity and failed to show any direction at all. Spot and nearby positions for white pepper were reportedly full and steady with shipment levels said to be slightly higher. Hot grades of red peppers were said to be very scarce. Vanilla beans remained relatively firm with demand continuing on a strong level and holders at source remaining adamant in their position on sales at good price levels. No immediate shift in this market is anticipated, though with the erratic movement usual in this market, anything might happen.

### Price Trends

**Advanced**
None.

**Reduced**
Citronella oil, 5c. per lb.

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 145.65 | 145.65 | 142.84 | 135.36 |

*For Current Prices See Page 9*

## Essential Oils

**Citronella**—Ceylon quality oil declined last week to offer the second softening movement in the citronella market within the past two weeks. Previously Formosan (Java-type) oil had dropped 5c. to a $1.10 per pound spot quote. The Ceylon oil also dropped 5c., listing now on spot at 85c. per pound. The citronella market on the whole has been a soft one for some time. The tone derives in listing from the sudden shipping price decline at the beginning of the season. This occurrance, however, producers concede, was resultant of the heavy production and stocks of material present at Formosan source. Since that period, with the exception of a short respite during the Suez crisis, the market has been steadily easing in position with listings following suit throughout. There is little hope for succor at this time, though authorities and producers at source have reportedly been working on a program to organize production and thus stabilize the market.

**Geranium**—This material continued to firm on spot as well as at source, dealers here reported last week. The movement is resultant, it was contended, of an increase in consumption and demand occurring at the same time that supplies at source are diminishing. In some quarters, it was noted, dealers have advanced prices on Bourbon quality material by $1 per pound establishing their price for the regular grade at $17 per pound and the top grade oil at $18 per pound. It is still possible, it was noted, to obtain some spot goods at $16 to $16.50 but general conditions in the market suggest a further general rise in listings.

**Ocotea Cymbarum**—This material, according to sources, continued last week to show the easy tone that has prevailed in the entire safrol bearing oils market for some time. The listing for ocotea cymbarum, an exceedingly low price, (at one time defined by producers as virtually beneath the point of deminishing return), is between 50c. and 55c. per pound according to quality and quantity. Artificial sassafras, it was noted continued at the 46c. to 48c. quote. The other safrol bearing oils, i.e., bois de rose, also remained easy in tone, showing no particular direction and fulfilling immediate market needs but reaching no further than that point. There is little hope for any variation in the scene at present and no intimation that anything will change it in the immediate future. There were earlier reports of attempts to curb the bois de rose market and the situation in some areas of the foreign market (London), according to reports, reflected a movement toward firmness in that market. However, on the domestic scene, no such trend has been shown.

**Orange**—Relatively good demand with a continuation of the tight supply situation in California cold-pressed oil has been reported for this market. Some distributors of the organized dealer's material reportedly received a slight increase in their quota allotments to contract customers, covering the period January to July, but it is still suggested that greater supply could be sold just as quickly and easily. Demand from confectioners and bottlers, it was noted, have been constant and in steadily increasing volume atuned to the growth of the seasonal period. The other citrus oils also showed continued strength and development. The hot months, of course, are the high point, though citrus oils are generally considered a stabilizing element in the market and are, for the most part, always counted on to move to some degree, no matter what the general market situation may be.

### Imports Detained at N.Y.

**Period Ended April 5**

Bitter Almonds, 40 bags.
Black Pepper (7 lots), 1,010 cartons.
Caraway Seed, 100 cartons.
Cassia (21 lots), 3,136 cartons.
Celery Seed (4 lots), 351 cartons.
Coriander Seed (4 lots), 1,950 bags.
Cumin Seed (2 lots), 342 bags.
Fenugreek Seed, 99 bags.
Ginger (3 lots), 415 bags.
Gum Karaya (2 lots), 313 bags.
Mace (4 lots), 54 cases.
Nutmegs (3 lots), 235 bags.
Olives (3 lots), 107 barrels.
Papain, (6 lots), 272 chests.
Pimento, 60 bags.
Poppy Seed, 333 bags.
Sesame Seed, 132 bags.

## Aromatic Chemicals

**Citral**—This material declined last week on spot, dealers here reported. The current listing of about $4.30 per pound is 30c. a pound less than was previously quoted. The movement is the first for this material in some weeks.

**Eucalyptol**—This aromatic chemical, according to dealers and producers, is on the soft side, it was noted here last week. Current listings are about 5c. less than were previously quoted, though this is generally in the form of shading and official quotes continued at previous levels. Competitive conditions are considered the

## Essential Oils

major factor behind the markets condition, dealers suggested.

**Methyl Chavicol**—Reductions in the price schedule of methyl chavicol has been announced by a major producer. The move is attributed by the producer to response to last years announcement of the availability of domestic methyl chavicol and improvements in the methods of manufacture. The material, according to the producers, is now selling at reductions in price ranging from $1.50 to $2 per pound.

Methyl chavicol, also known as estragole, is used principally for compounding odors and flavors and is an important constituent of several of the natural essential oils.

**Iso-Eugenol**—This material, along with citral, is lower, dealers here on spot reported last week. The new listing for isoeugenol is a range of $3.45 per pound, according to quantity. The price movement, sources noted last week, is due to the highly competitive conditions existing in the clove leaf oil market. This source material has also, as a result of competition, been moving downward.

### Seeds and Spices

The pepper market, according to one dealer, continued a source of disappointment in that it did not offer any inducement to traders, on spot or abroad, to take a position. The limited business, it was noted, was mostly of a day-to-day character. There was insufficient room on the downside for a bear view and as far as a long position was concerned, it was felt that there was sufficient time to step in, should the market show signs of developing strength.

The New York market, the dealer noted, had great difficulty in maintaining even a small premium for spot, over replacements, despite the fact that stocks and afloats are by no means excessive. On the other hand, primary market are putting up a stubborn resistance to discounts despite the evidence of a supply which should spell a surplus even if world consumption should rise by 10 percent. It would thus seem that the value of pepper at the source, considering the high freight and other elements in the calculation, defies any further substantial reduction, even if a few thousand more tons were added to the overall supply.

**Pepper**—According to the report of another source, this market appears to be waiting to test its strength at the actual movement of the Sarawak crop. Reports indicate that the crop should be about the same size as last year. At one time it was thought that the crop movement might be earlier this year, but present indications are that no real quantity will come out before May shipment. For the past month, shippers abroad have refused to discount their spot price for May or June. Just why this is so, is hard to understand. In part it is reported that Europe has been a buyer at slightly higher levels than indicated here.

### ACCCE to Admit Social Science Students to April 24 Symposium

Association of Consulting Chemists and Chemical Engineers has made special arrangements to admit students of social science to its symposium, to be held April 24 at the Belmont Plaza hotel, New York. Such students will be admitted to the symposium at 7:15 p.m. for an admission fee of $2.

Subject of the symposium is "International Science a Catalyst for World Security." Guest speaker will be Prof. Johnson E. Fairchild, director of adult education at Cooper Union.

ACCCE's symposium will be preceded by a banquet, and the entire affair gets under way at 5:30 p.m. Letterhead reservations enclosing remittance for $10.50 per person must be received by the association, Room 82, 50 East 41st Street, New York 17, before April 19th. Students desiring to attend the symposium must send in their reservations, giving full name and address, with their $2 admission fees to the association before the nineteenth.


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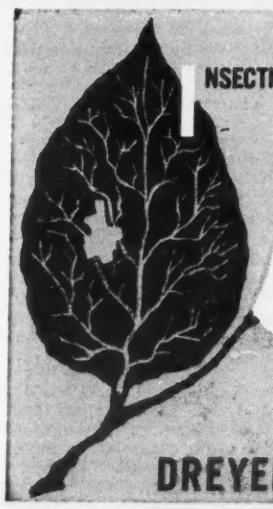
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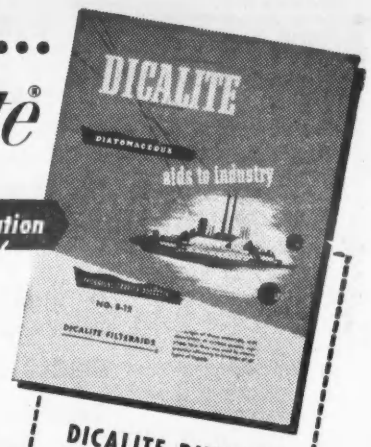

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# Agricultural Chemicals

Little development was noted in this market last week as foul weather in the West and Southwest continued to plague the domestic scene. The market which had been anticipated as a slow one was even further delayed, dealers and producers said, as a result of the weather condition. However, there is some expectation that once the weather situation clears, the market will open wide with a sudden surge. The storms have brought one bright factor with them: they watered the drought stricken lands of the Southwest where rain hadn't been seen for up to six years. However, some farmers in the area said that the water was too little and that unless it is followed up with further rain there will be no change in the situation there. The tight supply picture continued for ammonium sulfate with little hope that relief will be offered before the seasonal period closes. Animal protein dealers noted that their market remained slow because of prevailing weather conditions. The shipping market at present would otherwise be at its peak.

A recent report noted the growth in the use of aerial spray pesticides. Latest figures, the report said, show that over 7,000,000 acres of crop and pasture land were sprayed by air in 1955 and the total for 1956 is expected to be even higher. Over 2,000,000 acres of forest land were sprayed in 1956, it was noted, the larger portion of which was done by air.

Pesticide use, according to a source, will climb by one percent during 1957. This information is resultant of a survey taken in agricultural areas where informants said that advances were seen in all areas but the drought stricken South Central Region. Even this area, it has recently been observed, may show some growth in strength due to the water derived during the recent storms.

### Price Trends

**Advanced**
None.
**Reduced**
None

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 110.21 | 110.21 | 109.99 | 110.78 |

*For Current Prices See Page 9*

## Animal and Plant Foods

**Anhydrous Ammonia**—In a preliminary report of annual figures released by the Bureau of Census, anhydrous ammonia production for last year was tallied at 3,336,857 short tons as compared with the preliminary 1955 figure of 3,163,041 short tons.

Production figures for January noted that output for that month stood at 302,504 short tons as compared with the 279,055 short tons produced during January, 1956, and the 290,512 short tons produced during December, 1956. Stocks at producing plants during January were tallied at 173,046 short tons, an advance over the 145,509 short tons in stock at plants at the end of December.

**Ammonium Nitrate**—Production of this material during 1956, according to a report by the Bureau of Census, amounted to 2,237,673 short tons as compared with the 2,051,089 short tons produced during the year previous. Broken down, these figures showed that 1,838,348 short tons of the total 1956 figure was agricultural grade ammonium nitrate as compared with the 1,726,520 short tons of agricultural material produced during the year previous.

200,758 short tons of this material was produced during January of this year, the Bureau of Census report noted, as compared with the 196,960 short tons produced in December and the 211,188 short tons produced in January of last year. Stocks at producing plants at the end of January totaled 253,126 short tons as compared with the 256,600 short tons on hand at the end of December, 1956.

The break down of these figures showed that the production of agricultural grade ammonium nitrate during January amounted to 172,198 short tons as compared with the 170,628 short tons produced during the month previous and the 177,150 produced during January, 1955.

Stocks of agricultural ammonium nitrate on hand at producing plants at the end of January amounted to 238,746 as compared with the 244,152 short tons on hand at the end of the month previous.

Stocks of agricultural ammonium nitrate on hand at producing plants at the end of January amounted to 238,746 ascompared with the 244,152 short tons on hand at the end of the month previous.

**Ammonium Sulfate** — The preliminary annual report on this material noted that 1,086,836 short tons were produced in 1956 as compared with the 1,131,106 short tons produced during the year previous.

Production during the month of January amounted to 83,783 short tons as compared with the 71,700 short tons produced during December and the 95,387 short tons produced during the January of 1956. Stocks on hand at the end of January amounted to 253,126 short tons as compared with the 256,126 short tons produced during the month previous.

**Animal Proteins**—Prices stayed glued to previous positions last week, dealers and producers reported, as foul weather conditions that have prevailed for the past month continued unabated. With the third major storm to hit the west in as many weeks, the already delayed market was expected to be even further held-up. This, of course, is also a factor in the pricing situation. One major dealer conceded that with material moving as it usually would be at this time, during the height of the shipping season, some of the material would be expected to tighten in supply and would shift in price. But, under present conditions with movement strongly curtailed, there is little expectancy of any shift in the immediate future. However, there is some belief that once the weather condition clears the market will suddenly blossom.

**Superphosphate** — Total production of this material during January, according to a report by the Bureau of Census, amounted to 220,497 short tons as compared with the 208,016 short tons and the January, 1956, tally of 253,904 short tons. Stocks on hand at the beginning of the month amounted to 414,743 short tons as compared with the 401,249 figure for the beginning of December and the 393,932 stock tally for the beginning of January, 1956. Shipments were computed at 158,988 short tons for January; 135,960 short tons for December, and 160,432 short tons for January, 1956. Stocks on hand at the end of the month amounted to 415,459 short tons as compared with the 414,743 short tons for December and the 418,373 short tons at the end of January, 1956.

A breakdown of the above figures show that normal and enriched superphosphate production during January amounted to 138,422 short tons as compared with the 127,633 figure for December and the 157,315 short tons produced during January of 1956. Stocks on hand at the beginning of the month amounted to 216,885 short tons, 207,440 and 225,401 short tons for January, December and January, 1956, respectively while stocks on hand at the end of the same months amounted to 218,689 short tons, 214,980 and 236,990 short tons.

### Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during the last year and corresponding data for the first month of this year.

| | December | November |
|---|---|---|
| DDT | 136,963,002 | 10,876,405 |
| 2,4-D* | 28,131,727 | 3,042,246 |
| Esther & Salts | 23,178,454 | 2,427,334 |
| Acid equivalent | 17,603,426 | 1,738,410 |
| BHC | 85,306,548 | 7,836,223 |
| Gamma isomer | 14,369,453 | 1,236,403 |
| Tetramethylthiuram sulfide | 4,716,520 | 764,743 |
| 2,4,5-T | 5,131,499 | 286,064 |
| Lindane | | |

* Includes 2,4-D acid produced, separated and consumed in plant in the manufacture of its derivatives.

# Oils, Fats and Waxes

Trading in oils and fats was limited for most items, last week, while a good volume of business was reported for cottonseed and soybean oils. This caused the former to advance fractionally, while the latter remained firm despite lower soybeans. Corn oil was unchanged and well held. Peanut oil was offered at higher levels. Crude coconut oil was easy and slightly lower. Copra was inactive and nominal.

Spanish olive oil in drums was finally offered for shipment at prices well above other producing countries. This resulted in a lack of interest in the former. Stocks on spot were quite liberal and Tunisian oil was easy and lower.

Trading in tallow improved with soapers taking sizable quantities of the higher grades at slightly lower levels, while small lots were maintained at unchanged prices. Export business was reported light an spotty. Greases were quiet, and quotably unchanged.

Linseed oil rallied and was raised fractionally following the sharp reduction the week previous. Tung oil business was light and increased offers were reduced fractionally for prompt shipment. Moderate trading was reported in oiticica oil which remained steady with the strength of the Brazilian market. Trading in imported castor oil was spotty, but prices were firm and unchanged in sympathy with strong primary markets. Export business in crude menhaden oil was reported quiet. Offers were unchanged and steady.

Slow domestic and export demand for soybean meal weakened the market and quotations were off 50 cents per ton. Linseed meal stocks were scanty due to small production. Nearby delivery was raised 50 cents to $1 per ton.

Consuming interest slackened in carnauba wax, but prices were steady and maintained at the recent advances. Offers from Brazil continued light and were maintained at current high levels.

### Price Trends

**Advanced**

Cottonseed oil, crude, ¼c. per lb.
Rcfd., ¼c. per lb.
Lard, cash, ½c. per lb.
Linseed meal, 50c. to $1 per ton.
Linseed oil, 2/10c. per lb.
Linseed oil acid, 2/10c. per lb.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Spermaceti wax, 1c. per lb.

**Reduced**

Coconut oil, crude, ½c. per lb.
Lauric acid, ¾c. per lb.
Olive oil, Tunisian, 5c. per gal.
Peanut meal, $3 per ton
Soybean meal, 50c. per ton.
Tallow, inedible, fancy bleach., ½c. per lb.
inedible, prime, ¼c. per lb.
inedible, special, ½c. per lb.
Tung oil, ¼c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 118.76 | 119.71 | 119.64 | 111.37 |

*For Current Prices See Page 9*

## Vegetable Oils

**Castor**—Domestic grades were in fair request at unchanged quotations. Brazilian oil also was unchanged and steady at 20¾c. to 21c. per pound, tankcars, New York, prompt delivery.

**Coconut**—Crude was dull and easy. Tankcars were lower at 11⅛c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment and 12⅛c., New York.

**Corn**—Trading in crude was spotty. Tankcars were sold at 13¾c. per pound, tankcars, f.o.b. mills. Refined was unchanged at 17.41c. per pound, tankcars, New York, prompt delivery.

**Cottonseed**—Futures were irregular, but rallied and scored moderate gains for the week. Trade interests absorbed May delivery and it sold above July. Market displayed a steady tone and reflected the strength of cash crude and refined oil. Export business was reported both in crude and refined grades. Offers for crude were scarce and closely held. Refined salad was firmer and raised to 17c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was held at 13⅜c. per pound, tankcars, f.o.b. mills, southeast and Valley; 13⅛c. Waco and 12⅞c. nominal Lubbock.

**Linseed**—Trading was reported confined to immediate requirements. Deliveries against contracts was more and closer to seasonal volume. Market was steady and slightly higher. Raw oil was raised to 12.7c. per pound, tankcar, Minneapolis, April-June delivery and 13c., exwarehouse.

**Flaxseed**—Stocks of flaxseed on farms on April 1 were indicated at 17,332,000 bushels compared with 7,871,000 last year and 1946-55 average of 9,455,000 bushels.

*Minneapolis.*—Cash flaxseed market remained in the doldrums, offerings almost negligible and crusher interest at a low ebb. Limited production of area plants has been the prime factor in market weakness, and there were no indications of capacity operations in the immediate future. On April 30th the government takes title to nearly 17,000,000 bushels of flaxseed, which will be moved to Minneapolis-Duluth during May for disposition by CCC. Bids in the cash flaxseed market remained at $3.15 a bushel, spot and to-arrive, basis Minneapolis—the level that has prevailed since March 29. Only 2 cars traded in the spot market, while 5,000 bushels were booked to-arrive.

Receipts and shipments of flaxseed, in bushels, were as follows:

| | Receipts 1956-57 | Receipts 1955-56 | Shipments 1956-57 |
|---|---|---|---|
| Past week ..... | 138,600 | 206,500 | 61,200 |
| Since Sept. 1..... | 16,949,800 | 22,403,500 | 2,461,600 |

**Olive**—Offers of Spanish oil in drums for shipment were announced last week at $80 per kilos, f.o.b. Spain. Buying interest at this figure was lacking due to lower prices for shipment from other primary sources. Tunisian oil was available at $73 to $74 per 100 kilos, c. and f. New York and new crop Argentine oil at $72, same basis for June shipment. Stocks were liberal on spot and for nearby arrival with demand slow. Tunisian was quoted at $3.10 to $3.15 per gallon, drums, spot duty paid as to quality.

**Peanut**—This market was more or less nominal. Crude was sold at 13¾c. per pound, tankcars, f.o.b. mills, and 14c. bid. Refined was higher at 17¾c., tankcars, New York, prompt delivery.

**Soybean**—Trading was reported fairly active for export. Market closed firm. Crude was sold at 12⅝c. per pound, tankcars, Decatur, April delivery; 12½c., May; 12⅜c., June and 12¼c., July. Refined salad was held at 15⅝c. per pound, tankcars, New York, prompt delivery.

The Department of Agriculture reported stocks of soybeans on farms April 1 at 116,323,000 bushels compared with 60,334,000 last year and 1946-55 average of 50,730,000 bushels.

**Tung**—Trading was less active with offerings liberal at slightly lower levels. Tankcars were quoted at 22¼c. per pound, New York, April-May delivery and 22c. June forward. Domestic oil was quiet and nominal at 22c., tankcars, f.o.b. mills. Drums were lower at 23¾c. to 24½c. per pound, spot as to quantity.

### Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, April 12, follow:

| | Sales | High | Low | Close |
|---|---|---|---|---|
| | | Cents per pound | | |
| May ..... | 452 | 15.79 | 15.43 | 15.75S |
| July ..... | 725 | 15.78 | 15.43 | 15.69S |
| Sept. ..... | 131 | 15.50 | 15.60 | 15.47S |
| Oct. ..... | 55 | 15.28 | 15.07 | 15.25@15.29 |
| Dec. ..... | 137 | 15.24 | 15.05 | 15.14@15.15 |
| Mar. (1958). | 10 | 15.20 | 15.07 | 15.09@15.15 |
| May (1958). | 2 | 15.15 | 15.15 | 15.04@15.12 |

Total sales and switches, 1,512.

### Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, April 12, follow:

| | Sales | High | Low | Close |
|---|---|---|---|---|
| | | Cents per pound | | |
| May ..... | 4 | 12.55 | 12.50 | 12.50@12.55 |
| July ..... | 8 | 12.28 | 12.16 | 12.16@12.17 |
| Oct. ..... | 4 | 11.44 | 11.44 | 11.49@11.55 |
| Dec. ..... | 1 | 11.50 | 11.50 | 11.30@11.42 |

Total sales, 17 contracts.

## Miscellaneous

**Castor Beans**—This market continued merely nominal around $180 per ton, f.o.b. Brazilian port, prompt shipment.

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# Oils, Fats and Waxes

at New York and Philadelphia last week were as follows:

| | Pounds | |
|---|---|---|
| | Beans | Oil |
| Last week | 499,950 | 1,562,000 |
| Previous week | 101,640 | 600,000 |
| Corresponding week, 1956 | | 1,220,000 |
| Total this year | 9,767,890 | 32,198,000 |
| Corresponding period, 1956 | 15,415,300 | 23,321,500 |

## Fats and Greases

**Greases**—While trading was spotty, light offerings were maintained at unchanged quotations. Choice white all hog remained firm at 8⅞c. to 9c. per pound, tankcars, delivered as to seller. Yellow grease also was well held at 6⅞c. to 7c. basis.

**Lard**—This market was irregular but closed firmer. Cash lard was higher at 14.80c. per pound, drums Chicago.

**Oleo Oil**—Reduced production kept this market strong. Extra was nominal at 19c. per pound, drums, according to seller and quantity. Oleo stearine was steady and ranged from 13c. to 13½c. per pound, same basis.

**Tallow**—Trading was quite active for soapers account, with sales reported at ⅛c. less for large quantities, while small lot buyers had to pay the higher price. Bleachable fancy was moved from 7⅝c. to 7¾c. per pound, tankcars, delivered, according to quantity; prime, 7⅜c. to 7½c; special, 7c. and No. 1, 6⅞c., same basis. Export business was reported spotty. Fancy was quoted 8⅛c. to 8¼c. per pound, bulk, f.o.b. and 9¼c., drums, f.a.s.

### Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, April 12, follow:

| | Sales | High | Low | Close |
|---|---|---|---|---|
| | | Cents per pound | | |
| July | 1 | 7.90 | 7.90 | 7.95@8.00 |

Total sales, 1 contract.

## Cake and Meal

**Cottonseed Meal**—Trading was slow. Offers were limited and quotably unchanged. Meal 41 percent was quoted at $55 per ton, sacked Memphis; $57, Alabama; $59, Georgia and South Carolina, April-May shipment.

**Linseed Meal**—Limited stocks for nearby delivery were raised 50c. to $1 per ton. Demand slow.

*Minneapolis.*—Strength persisted in linseed meal market, influenced more by extreme scarcity than any aggressive demand from trade. Most crushers were out of the market except for occasional spot cars and prices were 50c. to $1 higher. Trade resisted current high levels, confident that resumed production of area crushers would result in substantial reductions. Expeller meal prices advanced 50c. and traded at about the same level as extracted. Crushers quoted extracted linseed meal, 34 percent protein, at $58.50 to $59 a ton, bulk, in carlots, f.o.b., Minneapolis. Expeller supplies, 32 percent protein, were at $58.50 for April shipment; $57.50 for May; $57 for June/August.

Shipments of linseed meal, in pounds, were as follows:

| | 1956-57 | 1955-56 |
|---|---|---|
| Past week | 9,180,000 | 12,480,000 |
| Since Sept. 1 | 439,540,000 | 519,730,000 |

**Peanut Meal**—Demand was reported quiet. Forty-five percent was easier at $45 per ton, sacked, f.o.b. Alabama and Georgia. April-May shipment.

**Soybean Meal**—Buying interest lagged for nearby delivery and quotations were lower. Forty-four percent was quoted at $45 per ton bulk, Decatur, April; $46 May-September same basis, and $47 to $48, bulk, f.o.b. Mississippi Valley, April-May Shipment.

## Waxes

Steady tone continued to prevail in the vegetable wax market despite light and spotty business. Carnauba grades remained strong with recent advances maintained for all grades due to the firmness of the Brazilian market. Some improvement was reported in the demand for refined beeswax, reflecting the strength of crude grades. Candelilla wax was quiet, but limited stocks here and Mexico were closely held. Spermaceti wax was lifted 1c. per pound, due to increased cost of production.

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# Coatings Materials

A producer of lead pigments last week announced price reductions, effective immediately, amounting to ¼ cent per pound in litharge and ¾ cent to 1 cent per pound in red lead. Observers here saw the move as a reflection of market policy rather than changes in raw materials costs, as there has been no reduction in pig lead or other raw materials. Major competitors in the lead oxide field are reported to be reviewing this development to decide if market conditions warrant similar action. Because of the reduction, the following price ranges are now in effect:—litharge, 17¾ cents to 18 cents per pound; red lead, 95 percent, carlots, 18¼ cents to 19 cents per pound; less than carlots, 19¼ cents to 20¼ cents per pound; 97 percent, carlots, 18.45 cents to 19.20 cents per pound, and less than carlots, 19.45 cents to 20.20 cents per pound.

In the plasticizer field, there were reports last week that action was impending in dioctyl phthalate quotations. Rumor has it that one of the producers would soon announce an official reduction of 1 cent per pound, thus making the material 27 cents per pound in tankcars. Some observers give credence to this rumor because of the fact that many companies negotiate dioctyl sales on an individual basis, with the price often running as low as 27 cents per pound or more generally 27½ cents per pound. At least one company, though, has reported that it considers 28 cents per pound to be the most reasonable price in view of production costs, and that consequently it will try to hold the line at that level.

Buying was still quiet in the casein market, indicating to some observers that consumers were awaiting developments on the tariff situation. As reported here previously, efforts are being made to introduce in congress a bill that would eliminate or substantially lower the duty on imported caesin. Passage of this bill could result in prices about 2 cents or 3 cents per pound below the current listings, a dealer pointed out. Despite the lag in buying interest, enough material was moving for immediate requirements last week to hold prices steady at 22 cents to 22½ cents per pound, on the regular duty paid, New York delivered basis.

Aside from these development there was nothing new reported in the coatings materials field. With many major industries buying only on a hand to mouth basis because of ambiguities in the business picture, the sales pace is not as lively as last year's. Trading in natural resins, including shellac and gums, was dull and featureless at unchanged prices.

Domestic output of gypsum was 17 percent lower in the fourth of last year than in the same period of 1955, the Bureau of Mines has reported. However the decline in crude output during the year as a whole was only 2 percent, the Bureau noted. In a report issued last week by the Bureau of the Census, production of glue was shown to be seasonally lower during February with supply levels approximately unchanged.

## Price Trends

**Advanced**

None.

**Reduced**

Lead, red, ¾c. to 1c. per lb.
Litharge, ¼c. per lb.

**Comparative Price Indexes**

(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 100.77 | 100.77 | 100.79 | 100.08 |

*For Current Prices See Page 9*

## Prime Pigments

**Antimony Oxide**—Although this material has had to yield a little ground to competitive pigments, it is still finding many uses in paint manufacture, producers reported last week. Prices were adjusted downward a year ago because of changed market conditions and since have held steady. The supply is ample.

**Chrome Colors**—Output of chrome colors totaled 4,258 short tons during the month of January, as compared with 4,494 tons in the previous month and 4,114 tons during January, 1956, the Department of Commerce reported last week. January production of chrome green (chrome yellow and iron blue) was reported at 473 short tons as compared with 486 tons in December. Chrome oxide green production amounted to 466 tons, a sharp advance over the 373 tons produced in December. Output of chrome yellow and orange was 2,035 tons as against 2,299 tons during the prior month. Molybdate chrome orange production reached 553 tons in January, an amount approximately equal to the previous month's output. Zinc yellow (zinc chromate) production was 731 short tons in January as compared with 775 the month before.

**Lead Pigments**—A producer of lead pigments last week announced price reductions, effective immediately, of ¼c. per pound in litharge and ¾ to 1c. per pound in red lead. The move was apparently a reflection of market policy rather than changes in raw materials costs as there has been no price reduction announced in lead metal or other basic materials. The major competitors are reported to be reviewing this development to decide if market conditions warrant similar action. As a result of the reduction, the following price ranges are now in effect:—litharge 17¾c. to 18c. per pound; red lead, 95 percent, carlots, 18¼c. to 19c. per pound; less than carlots, 19¼c. to 20¼c. per pound; 97 percent, carlots, 18.45c. to 19.20c. per pound; and less than carlots, 19.45c. to 20.20c. per pound.

## Miscellaneous

**Casein**—The market was still quiet last week, reportedly because consumers were awaiting developments on the tariff situation. Efforts are being made to introduce legislation in congress that would eliminate the tariff on casein. Passage of the bill would result in prices about 2c. to 3c. per pound lower than current listings, a dealer pointed out. According to this dealer, the main argument in favor of such a bill is the fact that domestic production of casein has declined to an almost nominal rate, with the material selling at a price higher than that of imported casein and being limited to specialty uses. Some observers see the decline in domestic production as a result of the price support program. The program, these observers say, has had the effect of discouraging casein production by making it more profitable to produce skimmed milk and skimmed milk products.

**Glue**—The following figures compiled by the Bureau of Census indicate production shipments and stocks of bone and hide glue in thousands of pounds during February with January's figures shown for comparison.

**Production**

| | Feb. | Jan. |
|---|---|---|
| Hide glue, total | 4,940 | 5,486 |
| Low grade | 2,003 | 2,448 |
| Medium grade | 1,444 | 1,582 |
| High grade | 1,047 | 1,068 |
| Extra high grade | 446 | 388 |
| Bone, glue total | 5,005 | 5,567 |
| Green | 3,863 | 4,249 |
| Extracted | 1,142 | 1,318 |
| Glue, total | 9,945 | 11,053 |

**Shipments**

| | | |
|---|---|---|
| Hide, glue total | 4,647 | 5,268 |
| Low grade | 1,846 | 1,968 |
| Medium grade | 1,292 | 1,572 |
| High grade | 1,035 | 1,210 |
| Extra high grade | 474 | 518 |
| Bone, glue total | 5,412 | 6,931 |
| Green | 4,454 | 6,216 |
| Extracted | 958 | 715 |
| Glue, total | 10,059 | 12,199 |

**Stocks**

| | | |
|---|---|---|
| Hide, glue, total | 21,197 | 20,904 |
| Low grade | 7,521 | 7,364 |
| Medium grade | 6,179 | 6,027 |
| High grade | 5,161 | 5,149 |
| Extra high grade | 2,336 | 2,364 |
| Bone, glue, total | 8,491 | 8,898 |
| Green | 5,828 | 6,419 |
| Extracted | 2,663 | 2,479 |
| Glue, total | 29,688 | 29,802 |

## Lacquer Materials

There was a rumor circulating last week that one manufacturer of dioctyl phthalate would announce a 1c. per pound decrease in the official price listing, making the quotation 27c. per pound. While this move has not received confirmation yet, much credence is placed in it because of


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## Coatings Materials

the fact that dioctyl has been moving at or near that price in many transactions. This situation exemplifies a chronic condition of the market resulting from price competition of marginal firms, producers pointed out. A reduction in official listings is more than a mere technicality, however, since it is often accompanied by a further decline in the unofficial price range. In this manner the price has eased a full 4c. per pound in the last year.

The other phthalates continue to show a healthier tone than dioctyl. Although competition between manufacturers of diethyl and dimethyl phthalate is brisk enough there is no price shading reported between the major producers. In fact quotations were uniformly moved up last October when phthalic anhydride rose in price.

A stable and normal sales level was reported last week for adipates and sebacates, all of which were available in ample quantities.

### Naval Stores

**Pine Gum**—For the week ended March 30, the average price per barrel of crude pine gum was reported at $25.49, as compared with $25.45 during the previous week and $27.13 a year ago. The volume of gum deliveries to plants was 3,800 barrels, as against 3,078 barrels the previous week and 4,706 barrels a year ago. Average per barrel content was 10.78 gallons of turpentine and 297.5 pounds of rosin. Gum grading percentages were as follows: WW, 6; WG, 22; N, 28; M, 29; and K and below, 15.

**Rosin, Gum**

(USDA, per 100 lbs.)

| | Fri. Apr. 5 | Mon. Apr. 8 | Tues. Apr. 9 | Wed. Apr. 10 | Thur. Apr. 11 |
|---|---|---|---|---|---|
| Drums— | | | | | |
| K | ... | ... | ... | ... | $7.50 |
| M | ... | ... | ... | ... | 7.55§ |
| N | ... | ... | ... | ... | 7.65 |
| WG | ... | ... | ... | ... | 8.43§ |
| WW | $8.65 | $8.70 | ... | ... | 8.725§ |
| Bags— | | | | | |
| G | ... | 7.38 | ... | ... | ... |
| I | ... | ... | $7.50 | ... | ... |
| K | ... | ... | 7.50 | ... | ... |
| M | ... | ... | 7.50 | ... | ... |
| N | ... | ... | 7.60 | ... | ... |
| WG | ... | ... | 8.25 | $8.40 | ... |
| WW | ... | ... | ... | ... | 8.35 |

Tankcars (for week ended April 5)—M or better, $7.19§

Sales, USDA

293* 468* 240* 240* 549*

New York

(Per 100 lbs., c.l., Friday)

WW, $10.30; WG, $9.90; N, $9.25; B through M, $9.00

**Turpentine, Gum**

(USDA, per gal., 7.2 lbs.)

| | | | | | |
|---|---|---|---|---|---|
| Price | ... | ... | .585 | ... | ... |
| Sales | ... | ... | 4,000¶ | ... | ... |

New York, Friday, per gal. lbs., tankcars, 66c.; l.c.l., 82c.

* Drums equivalent. ¶ Gallons. § Average price.

### Fillers and Inerts

**Gypsum**—Output of gypsum from domestic mines was 17 percent lower in the fourth quarter of 1956 than in the same period of the previous year, the Bureau of Mines has reported. Imports also showed a 17 percent decline, the Bureau noted. Consumption of both cement-retarder and agricultural gypsum was substantially higher—gaining 13 and 59 percent respectively — but these gains were more than offset by declines of 17 percent in calcined gypsum, 9 percent in building plasters, 23 percent in gypsum boards and 20 percent in tile. Production of industrial plasters was slightly higher than in the previous fourth quarter.

During the year as a whole, crude output was only 2 percent below the level of the previous year. The 1956 cumulative totals showed gains over 1955 in imports and production of uncalcined material and calcined gypsum for industrial uses. These increases ranged 9, 15 and 12 percent, respectively. Losses were registered in output of calcined gypsum, 3 percent; building plasters, 5 percent; gypsum boards, 5 percent, and tile 10 percent. The apparent domestic supply of crude gypsum for the year totaled 14,659,638 tons, an increase over the previous year of one percent. Comprising the total were 10,312,784 tons of mined gypsum and 4,346,854 tons of imported material.

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## *Hoffmann-La Roche*

—*Continued from page 5*

new drugs that lower blood pressure from acetylene and the development of a second series of pressure-lowering drugs, one of which has eighty times the potency of presently used compounds.

Explaining the significance of the Hoffmann-LaRoche development, Dr. Kimel pointed out that lemongrass, found in parts of Africa, Asia and Central America, yields lemongrass oil, basis of today's most widely-used synthesis of vitamins A, E and K, and of b-carotene—a substance from which the body can make vitamin A.

**Fluctuation in Prices Noted**

However, he pointed out, in times of political unrest, or crop failures, the supply cannot compete with demand, and prices fluctuate from less than $1 a pound to $4 a pound. During World Wars I and II, he added, it was almost impossible to obtain any of the oil. Vitamin A and b-carotene also come from fishliver oil, but this is a relatively minor commercial source.

Because of this, Hoffmann-La Roche started a research project to find a way to produce pseudoionone, the raw material obtained from lemongrass oil, which has been used for the commercial production of synthetic vitamin A.

Dr. Kimel's group succeeded in producing the compound from acetone and acetylene. Dr. Otto Isler of F. Hoffmann-La Roche & Co., Basle, Switzerland, cooperated with the research group in New Jersey in setting up the manufacturing process.

In addition to its use for the drug industry, Dr. Kimel predicted that the process will also provide raw materials which will be valuable to perfume manufacturers for the development of new fragrances. It should also be of prime importance to those firms engaged in the production of new flavorings and toilet goods.

**Hercules' New Bug-Killer**

Hercules' new bug-killer, tested for three years at government and university agricultural centers, "will be available commercially to some of the nation's farmers this year," according to Dr. W. R. Diveley of the Wilmington concern.

The pesticide, he said, has been recommended by various state authorities for use on cotton. Results indicate, he added, that it will be useful on citrus and deciduous fruits, grapes, vegetables and ornamental plants. It also has proved effective in controlling cattle ticks.

The new USDA antibiotic, named "Duramycin" because it has proved to be very stable against heat, was obtained from an antibiotic mixture which is effective against several maladies afflicting beans, wheat and bluegrass.

Rayonier's new synthetic polyester fiber, ACS was told, is based upon vanillin, which is converted in the firm's process into protocatechuic acid.

The method for making the new polyester material—as yet unnamed—still has some "bugs," according to Dr. Louis H. Bock of Rayonier, who added that it may be considered to be in a stage of development similar to that of nylon in the mid-1930's.

**Rayonier Not Interested in Fiber**

Rayonier, he pointed out, is a basic raw material producer and has no interest in producing the fiber, but, he said, it might consider marketing the protocatechuic acid.

Ciba's new drug is able to ease pain without causing the patient to lose consciousness, Dr. George deStevens reported to ACS.

Dr. deStevens, who is senior research chemist in Ciba's medicinal division, said the new analgesic appears to be free from a serious side-effect of morphine—the tendency to slow down the rate of breathing.

## *Diamond Alkali*

—*Continued from page 3*

kali-based products manufactured by the firm during its early years.

In its two years of research leading up to the adoption of the new trademark, the concern points out, one of the striking facts it learned was that the diamond shape alone is no longer distinctive.

"To illustrate the point," it reports, "a check at the US Patent Office made by one of the designers consulted on our problems revealed that approximately 9,000 registered trademarks featuring the diamond shape are on file there.

"No estimate of the number of unregistered trademarks using this shape is available, but many do exist. The diamond shape has become so commonplace in recent years that continued retention of its use as a basic of brand identity would truly keep us in a 'me, too' position."

As a result of these findings, Diamond engaged three design organizations, working independently, to prepare designs for a new company symbol.

Of the three designs submitted, the firm chose the "Chemical Diamond," the symbol created by Royal Dadmun & Associates, Inc., Baltimore, Md.

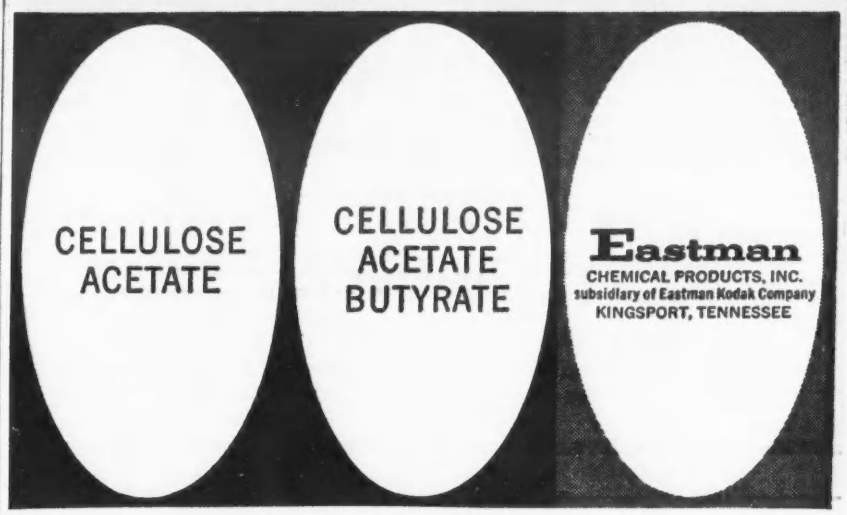
In the "Chemical Diamond," the company believes, it has a symbol "that (1) distinguishes us from our competitors, and (2) suggests the character, progressiveness and prestige of our enterprise."

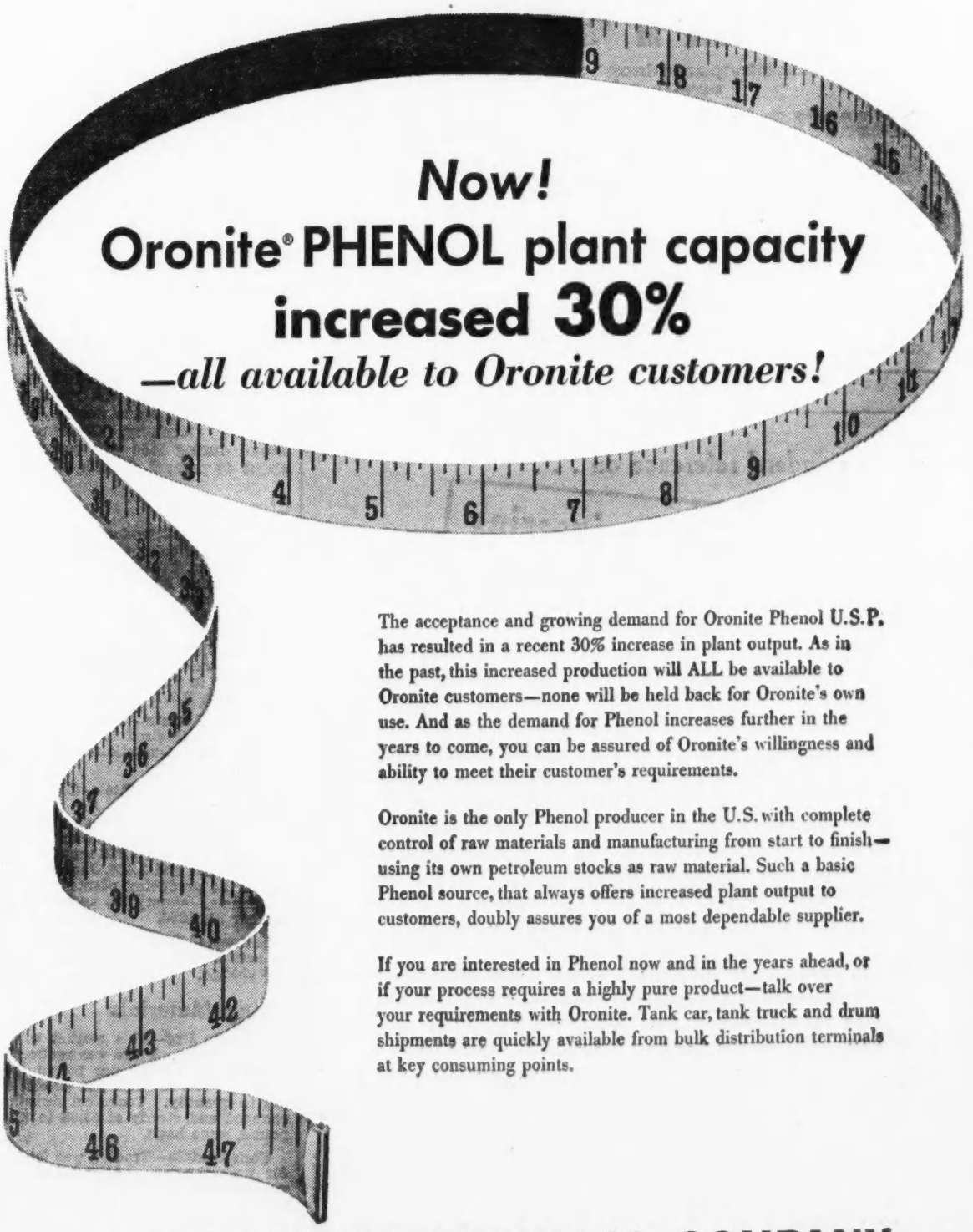
## Mutual Moves to 61 Broadway

Mutual Chemical, now associated with Solvay Process Division of Allied Chemical & Dye Corporation, has moved its offices from 99 Park avenue to 61 Broadway, New York 6. Telephone (HAnover 2-7300) remains unchanged.

### Newport Industries Company Moves

Newport Industries Company, a division of Heyden Newport Chemical Corporation, will move on April 13 from 230 Park avenue, New York, to Heyden Newport's offices at 342 Madison avenue.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# Textile, Leather Chemicals

Consumers stepped up demand for textile and leather chemicals, chiefly for prompt delivery last week. This created a steadier tone in the market and prices were well held for most materials. Liberal stocks of flake albumin egg combined with keen competition dropped prices sharply while the technical grade remained unchanged and steady. Yolk also was firm. There was more buying interest was reported for June forward delivery in new crop Brazilian tapioca flour and moderate volume of sales was reported for June forward delivery below prices prevailing at the close of last year. Other sizing materials were in good request for prompt delivery. Potato starch production continued at capacity and moved steadily into consuming channels against current contracts. Demand for chemicals against former orders also was quite active.

Some improvement in buying interest was reported for tanning material replacements, but actual business was still limited and centered in nearby shipment.

World consumption of raw wool for 1956 is estimated at 2.8 billion pounds (scoured basis), 8 percent increase over 1955. The increased use has resulted in higher prices. Consumption in seven major consuming countries last year totaled 1,705,000,000 pounds compared with 1,569,000,000 pounds in 1955 and 1,382,000,000 pounds the 1934-38 average. The United Kingdom continued as the largest consumer. Britain last year used 475 million pounds compared with 435 million pounds in immediate pre-World War II years. The United States, the second largest user consumed 405 million pounds compared with the pre-war period of 310 million pounds. The largest single gain in consumption occurred in Italy where consumption in 1956 totaled 124 million pounds compared with 1934-38 average of 57 million pounds.

A factor that stimulated wool consumption has been the rapid recovery of wool textile industries in Japan and Western Germany. Consumption in Japan during 1956 was reported to be about 40 percent greater than in 1955.

### Price Trends

**Advanced**
None.

**Reduced**
Albumin egg, flake, 8c. per lb.

**Comparative Price Indexes**
(100=1949 average)

| Last week | Prev. week | Last month | April 13, 1956 |
|---|---|---|---|
| 105.32 | 105.33 | 105.33 | 107.36 |

*For Current Prices See Page 9*

## Chemicals

**Bichromates**—Production continued to move in good volume against current contracts. Spot business was moderate for actual needs. All grades were maintained at prevailing quotations.

Sodium bichromate and chromate output totaled 7,794 tons in January, against 9,649 in December and 11,383 in January last year. Stocks at producing plants amounted to 7,194 tons, January 31 compared with 8,691, December 31, 1956.

**Sodium Acetate**—Consumers continued to absorb fair sized lots for prompt requirements. Quotations were without change.

**Sodium Hydrosulfite** — Consuming demand was more active for prompt delivery. Market was steady at current quotations. Production of sodium hydrosulfite in January totaled 2,220 tons against 1,805 in December and 2,484, January last year. Stocks at producing plants amounted to 2,035 tons, January 31, against 1,934, December 31, 1956.

**Sulfonated Oils**—Trading was restricted to actual needs. Quotations were without change.

## Sizing Materials

**Albumin Egg**—This market was unsettled and lower. Flake was reduced sharply to $1.28 to $1.30 per pound spot and powder, $1.32 to $1.34 per pound, according to quantity. Technical remained unchanged and steady at $1.08 to $1.10 per pound, same basis.

**Corn Dextrin**—Trading was fairly active for prompt needs. All grades were unchanged and steady. Gum was quoted at $9.33 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.07; dark canary, $9.17 and white, $8.91, same basis. Smaller lots were 15c. higher.

**Corn Starch**—Moderate volume of business was reported for prompt delivery. Prices were maintained at unchanged levels. Pearl was quoted at $7.32 per 100 pounds, paper bags, carlots, New York basis and powder, $7.44, same basis. Less carlots were 15c. higher. Visible corn supply increased 6,531,000 bushels to 109,969,000 bushels for the week ended April 5, against 56,503,000 bushels for the corresponding week last year, according to the Chicago Board of Trade.

**Egg Yolk**—Lower cost of albumin egg created a steadier tone, with some sellers raising quotations 2c. per pound. The advance was not general and quotations ranged from $1.01 to $1.03 per pound, spot according to quantity and seller.

**Potato Starch**—Moderate volume of business was reported for immediate delivery, while consumers continued show little interest in later requirements. Requests against contracts were active. In Maine quotations were held at 6¼c. per pound, carlots, f.o.b. mills and ¼c. less for delivery outside of New England and mid-Atlantic states. Idaho starch was maintained at 6½c., mills, carlots and ½c. less to points east of the Rockies. Stocks on spot were unchanged at 8¼c. to 9¼c., ex-warehouse as to quantity.

**Tapioca Flour** — Trading in new crop Brazilian was still limited, with some business reported for forward delivery on the basis of 9¼c. per pound, exdock New York carlots, for June forward delivery. While replacements were lower, limited stocks on the spot were unchanged and held from 12½c. to 13½c. per pound, ex-warehouse, as to quantity. Siamese flour was unchanged and steady. Medium was quoted at 5½c. per pound, carlots, exdock, prompt shipment and AAA at 7c., same basis.

## Tanning Materials

Canadian leather footwear production in 1956 rose 9.2 percent over 1955. Output in December totaled 2,868,712, a decrease of 883,600 pairs from November and a decline of 151,742 pairs from December 1955. Production of footwear with leather soles dropped slightly. In 1956 16,489,716 pairs, or 38.9 percent, of total production had leather soles, compared with 15,161,334 pairs, or 39.1 percent, in 1955.

**Cutch**—Shipments were maintained at 8c. per pound, carlots, exdock, plus duty for June forward delivery.

**Mangrove Bark**—Buying interest lagged. Primary markets were unchanged and steady. African bark was quoted at $62 per ton, exdock, prompt shipment; Colombian, $57 per ton, and Ecuadorian, $54 same basis.

**Myrobalans**—Business was reported inactive. Primary market was steady at former levels. Genuine J1 was quoted at $63 per ton, exdock, prompt shipment; Bombay at $57 per ton and crushed at $79 to $80 same basis.

**Quebracho Extract**—Steady tone prevailed in the primary market. Business was reported spotty, chiefly for nearby shipment. Solid clarified was held at 10.7429c. per pound, and ordinary, 9.8035c. per pound, carlots, exdock, plus duty for prompt and later shipment.

**Valonia**—Prices of all grades for shipment have been withdrawn due to the unavailability of stocks.

**Wattle**—Buying interest was confined to nearby shipment. Volume of business was reported light. Prices remained steady. Fair average bark was quoted at $80 per ton, exdock, prompt shipment, merchantable, $75 per ton, same basis. East African extract, 60 percent was quoted at 8.275c. per pound, exdock, plus duty and South African, 8.4c. per pound, same basis.

## *Foote Gets Lithum*

*—Continued from page 3*

"there is more lithium available to industry than there ever has been."

Last week's announcement of lithium hydroxide contracts with AEC, and its increased availability for commercial use, followed within a month a drastic reduction to 78 cents per pound, in all quantities, from prices which formerly ranged from 80 cents to $1.12½ per pound, depending on seller.

Mr. Chambers' letter further states that the commission's "tails" are available to the company at the original selling price to AEC, less a small credit to cover the cost of rehandling. There is no general subsidy of the lithium industry by the commission.

Foote is not obliged to buy back lithium hydroxide from AEC at any predetermined rate. AEC is committed to withhold sale of any unreturned lithium owed to Foote Mineral for ten years after completion of the current contract.

This obviously protects the company, Mr. Chambers writes, from competing with a government stockpile, should there be surplus lithium at the end of the contract period. Other contract stipulations protect the company in the event of cancellation before the normal expiration date.

Under the company's second certificate of necessity for lithium expansion, the company's lithium-producing facilities are being amortized over the five year period of the contract.

The commission's current requirements are being met under existing contracts. They may, of course, choose to extend these contracts.

However, due to the fact that the facilities of all the participating lithium producers will have been substantially amortized at the end of their contract periods, the commission has made it clear that an extension would call for a proportional adjustment in selling price.

Clarification of the terms of our contract with AEC, Mr. Chambers concludes, should dispel troublesome rumors of either shortages or over-production of lithium with respect to the industrial market.

## *Polyethylene Is Seen*

*—Continued from page 7*

venience in food preparation. Often she is willing to spend a few pennies more for a convenience package since it means she will have to spend less time in the kitchen.

"There are dozens of examples of these new convenience packages made of polyethylene film already on the supermarket shelves, which will soon be joined by the boilable bag that is now emerging from the laboratories of food packers.

"Already on the market," Mr. Akers said, "are a number of laminations of polyethylene with paper or cellophane for single-portion servings of sugar, mustard and a variety of sauces.

"While convenience packages help save time for the housewife, they also will help the polyethylene film extrusion industry in broadening its markets. Sales of polyethylene film have grown at a tremendous pace in the last few years. It is estimated that in 1957 sales will approach 190 million pounds, an increase of about 27 percent over 1956. Considering that in 1953 total sales of polyethylene film were 45 million pounds, this rise has been spectacular," Mr. Akers said.

"In the packaging field itself," Mr. Akers concluded, "vigorous efforts are being made to broaden existing markets and to develop sound new ones. One of the big hurdles retarding the use of polyethylene film in the major market of automatic wrapping is that the original equipment was not designed to handle limp, flexible, thermoplastic films. This is one of the reasons why polyethylene film was not considered too seriously in the beginning for packaging of high-volume items such as loaves of bread, cigarettes or cereal boxes.

## *Cosmetic Chemists Set Parley*

*—Continued from page 7*

by Dr. P. G. I. Lauffer of George W. Luft Company, and "Problem Solving," by Derek Till of Arthur D. Little, Inc.

The afternoon session will feature these papers:

"A New Water Soluble Polymer for Cosmetic Compounding," by Charles A. Dittmar of B. F. Goodrich Chemical Company; "Some New Considerations About the Chemistry of Acne," by Dr. Thelma G. Warshaw of the department of dermatology and syphilology at New York University; "A New Family of Amphoteric Surfactants: Fatty Amino Acid Derivatives," by D. L. Anderson, Dr. J. W. Opie and A. J. Freeman of General Mills, and "The Pushbutton Age," by A. R. Marks of Wheaton Plastics Company.

## *Jobs & People*

**Arizona Chemical Company, New York—Bart F. O'Brien** has been named sales representative for Arizona Chemical in an area covering part of New Jersey, New York and the New England states.

Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation, New York—**D. M. Nielson** has been appointed assistant district manager in New York for Carbide and **R. H. Rehm** has been given a like post in Newark, N. J.

Michigan Chemical Corporation, St. Louis, Mich.—**William P. McDonnell** has joined Michigan Chemical's sales staff in New York.

Naugatuck Chemical Division of United States Rubber Company, Naugatuck, Conn.—**Gerald L. Dennis** has been made manager of field sales for Naugatuck Chemical.

Chas. Pfizer & Co., Brooklyn, N. Y. —**John E. McKeen,** president and chairman of Pfizer, has accepted the chairmanship of the drug and pharmaceutical division of the National Fund for Medical Education.

Shawinigan Resins Corporation, Springfield, Mass.—**Dr. Norbert MacDonald** of Shawinigan's research department has been awarded academic leave for the year 1957-58.


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2—Devine 4'x9' Atmospheric single drum.
1—Hersey 1½'x12' Rotary Hot Air 304 S.S. with steam coils.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
4—Bartlett & Snow Rotary 6'x30', 7'x30', 8½'x35'.
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**1—Link Belt 5'2"x20' Steel Roto-Louvre, oil fired.**

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2—Baker Perkins #17DAM, 200 gal. jacketed, Sigma Blades.
**1—Baker Perkins 100 gal., 304 S.S., Sigma Blades.**
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**1—Patterson 6' dia. Steel Conical, 15 HP motor.**
**5—Steel, jacketed, Powder 50, 225 and 350 cu. ft.**
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1—Eppenbach 1 HP, 304 S.S. Homo Mixer.

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**1—International 6'x7' porcelain lined Pebble Mill, 30 HP motor.**
3—Patterson, Abbe, 6'x8' unlined Ball Mills.
2—Abbe 5'x6' and 4'x5' Silex-lined Pebble Mills.
1—#2DH Mikro Pulverizer, 10 HP motor.
1—National 6"x12" Two Roll Mill, motor driven.
**5—Jeffrey Hammermills 20"x12", 15"x8", motor driven. NEW.**
1—Williams 30 HP Ball Bearing Hammermill.

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1—Sharples PY-14 Super-D-Canter, 304 S.S.
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2—Tolhurst 40" Suspended Steel Perforated 15 HP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
**2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.**
1—AT&M 36" center-slung, rubber covered, perforated basket.
**1—Tolhurst 32" Suspended, 304 S.S. perforated basket.**

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**1—1000 gal. nickel clad, jacketed, agitated Reactor.**
**2—Pfaudler 250 gal. glass lined, jacketed, agitated Reactors.**
3—Pfaudler 300 and 50 gal. glass lined, jacketed Reactors.
3—3000 gal., 304 S.S. jacketed, agitated Tanks 9'x7'.
1—3500 gal., 304 S.S. Horizontal Tank 5'6"x16'.
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2—Stokes #412G, 412B Vacuum Pumps, motor driven.
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4—Copper, Tunnel Cap: 24" dia. x 30 plate; 36" dia. x 27 plates; 36" dia. x 39 plate; 36" dia. x 59 plate.
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1—Stainless Steel Rotary Plate Spray Type, 30" dia. x 41 plate T304.
3—Stainless Steel Perforated Plate, 42" dia. x 18 plate, T316 plates, steel shell.
1—Stainless Steel Bubble Cap Section T347, 48"dia.—12 plates.
1—Stainless Steel Baffle Plate or Cascade Type, 60" dia. x 50' high, 63 plates, T304.
1—Stainless Steel Bubble Cap, 64" dia. x 13 plate, T400 series.
1—Steel Bubble Cap, 48" dia. x 22 plates.

### COMMINUTORS

1—Fitz. "D", Swinging Blades, St. St.
1—Fitz. "D-6", Fixed Blades, St. St.
1—Fitz. "F-8", Swinging Blades, St. St.

### COMPRESSORS

1—Worthington 11 x 7 x 7 Air Comp., 75 HP.
1—Ing. Rand 8 x 6 Air Comp., 30 HP.
1—Nash L-3 Air Comp., 15 HP.
1—Nash MD-573, Bronze, 10 HP.
2—Worthington W-12, 6½" x 6", Air.
2—Spencer Turbo, Size 8, 10 HP.
1—York Ammonia Comp., 12½ x 14½, Steam Driven, 135 ton.
1—De Markus $CO_2$ Comp., 7½ HP.
1—Taber $CO_2$ Comp., 7½ HP.

### CONDENSERS & EXCHANGERS

3—Stainless Steel Coil Condensers—40 sq. ft. & 55 sq. ft.
10—Stainless Steel Shell & Tube—13, 20, 24, 55, 135, 183, 200, 250, 425, 700 sq. ft.
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1—910 sq. ft. Admiralty tubes, steel shell & heads—UNUSED.
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1—5000 gal. Horiz. Pr. Cooker 6'6" dia. x 20' long, Agit.
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3—B—S Horiz. 16" dia. x 17' long.
2—450 gal. Stainless Steel Jktd. & Agit. Crystallizing Tanks, 5 HP.
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- Allis-Chalmers 6 x 7 x 100 Rotary Kiln, mtr.
- Devine Vac. Shelf Dryer, 17 shelves 80 x 60
- Rotary Kiln, 8 x 125, complete, less motor
- Groen 60 gal. Model RA agit. S.S. Kettle, new
- Groen 80 gal. Model RA agit. S.S. Kettle, new
- Lee 250 gal. S.S. Kettles, ASME construction (4)
- Bird 18" x 28" S.S. continuous Centrifuge
- A T & M 45" S.S. Centrifuge, perf. basket
- Bird 32" x 50" 316 S.S. cont. Centrifuge
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- Fitzpatrick Model D Comminuting Machine, 3 HP
- Micro Model 2-TH Pulverizer, 15 HP motor
- Day 40" x 120" single deck Ro-Ball Sifter
- Patterson 6' x 8' Buhrstone lined Pebble Mill
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- Robinson 36" single runner Attrition Mill
- Stokes Rotary RR-1 Tablet Press, 16 punch
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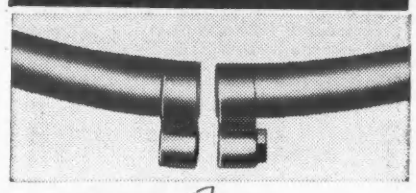

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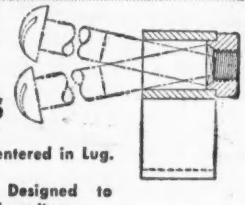

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2—Shriver filter presses 24", 1 aluminum, 1 lead.
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1—Swenson double effect evaporator, 835 sq. ft.
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1—Roball single deck sifter, 40 x 84", stainless steel.
1—Buflovak 6 x 8" chrome plated double drum dryer.
2—Link Belt twin paddle continuous mixers.
3—J. H. Day pony mixers, 2¼ gallon, 8 gallon.
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2—Stokes "R" Single Punch Preform Presses w/variable speed drives w/3 H.P. motors.
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3—Rotex Screens 20" x 48" to 40" x 84".
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H2 205—Premier 12" Stelite Colloid Mill; 50 HP motor.
3272 L1—Premier L15 Colloid Mill; 15"; with 30 HP AC motor
3397—Eppenbach Model QV8 with 5 HP A.C. Motor
3961 E1-7—Premier Stainless Colloid Mills Type U3; 6"; 15 HP motors
H2 179—Premier Colloid Mill Type U4 S.S.; 8" rotor; 20 HP
H2 196—Cherry Burrell S/S Homogenizer 1,800 GPM; 25 HP motor
H2 191—Premier U4 Paste Type 8" Mill; with 10 HP motor
3705 L2—Eppenbach Stainless Steel Colloid Mill Model QV7; 1½ HP
H2 194—Case S/S Emulsifier-Homogenizer; 350 GPM; 10 HP motor
4287A—Case Type 550 Stainless Steel Homogenizer; 15 HP
H2 204—Tri-Homo Homogenizer No. 6 S.S. Jacketed with 10 HP motor, Pump and 55 fittings.
4291—Manton Gaulin Type 125 CGC Stainless Homogenizer with 7½ H.P. Motor
H2 210—Manton Gaulin Sanitary Type S.S. Viscolizer 1000 GPH
H2 206—Manton Gaulin S.S. Sanitary Homogenizer; 125 GPM; 5 HP
4510—Marco Stainless Homogenizer No. 400 Capacity 750 GPH
H2 5300—Fitzpatrick Stainless Trifulating Homogenizer 5" Vert. Screw; Jacketed; 3 HP Motor

*SEND US YOUR LIST OF SURPLUS EQUIPMENT*

FRED R. FIRSTENBERG, *Pres.*

**FIRST MACHINERY CORP.**
209-289 TENTH ST.
BROOKLYN 15, N. Y.
STerling 8-4672

# Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$5.00, thirty-six words or less; 85c. for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication.

*Send replies to ads with box numbers to*
OIL, PAINT AND DRUG REPORTER
*30 Church st., New York 7, N. Y.*

### BUSINESS OPPORTUNITIES

**First Class** old established Belgian firm would like to add some new lines to its activity and interested in first class agencies from Pro- ducers in the ... chemical and raw material fields. ... textile sector. Is in contact with the entire ... Apply Kennes, Meir. 80, Antwerp (Belgium).

### EQUIPMENT OFFERED

**For Sale**—Raymond 5 Roller Mill complete with Mill and Fan motors and starters. Stored southeast West Virginia. Advise products to be ground for applicable specifications and price. Aiken Clays, 1619 West Central Ave., Orlando, Florida.

**For Sale:** 42" x 120" Double Drum Dryer; 42" x 100" Double Drum Dryer; 42" x 90" Double Drum Dryer; 24" x 36" Double Drum Dryer; 93 sq. ft. S.S. Heat Exchanger ASME; Three S.S. Sanitary Heat Exchangers to 150 sq. ft.; 110 gal. S.S. Jacketed blender ASME; 75 gal. S.S. Sigma Blade Jacketed Mixer. Best Equipment Company, 1737 Howard Street, Chicago 26, Illinois. AMbassador 2-1452.

**Molten Sulfur** tank cars for lease: Now in W. Texas; 8 ea 9800-gal. cap. 70-ton trucks, welded coils, steam-jacketed outlet, outside-operated valve mechanism. Prefer minimum 6-month lease, thereafter monthly. OPD 313.

### FACILITIES OFFERED

**Save supervision** and equipment costs. Use our stainless steel and standard blending and grinding equipment to handle your dry chemicals. Plant located near New York City. Work laboratory controlled. OPD 310.

### FOR RENT

**Newark, N. J.,** 16,500 sq ft. desirable industrial property. One and two story brick buildings—sprinklered. High pressure steam. C.R.R.N.J. siding. Excellent for Chemical manufacturing. 1 minute from Pulaski Skyway and Jersey ... Principals only. OPD 316.

### MATERIALS OFFERED

**Dioctyl Phthalate.** Have 7255 gallons of prime DOP. Will take 24 cents per pound delivered or best offer. OPD 315.

**Surplus Chemicals.** Fair prices for warehouse lots, cancelled orders, overstock. Send full details for cash bid to Tobey Chemical Co., 1480 B'way, N.Y., LOngacre 4-2520.

**Perchlorethylene, Waste,** off grade, contaminated, surplus stocks. Drums, tank trucks or tank cars. Send full details for cash bid to: Industrial Organics Corporation, P.O. Box 26, Sayreville, New Jersey. Telephone: South Amboy 1-2334.

**Insecticide Formulators:** 22,000 lbs. of Morpholine Salt of 2,4-D. Other items available at way below market: 2,000 gallons Ethylcellulose Spraying Lacquer; 60 tons Used Tallow. Industrial By-Products & Surplus Co., 40-40 Lawrence Street, Flushing 54, N. Y. INdependence 1-4100.

### POSITIONS OFFERED

**Progressive, Expanding** chemical organization seeks salesman for selling industrial chemicals to paint, plastic and textile companies. Splendid opportunity. Write resume of experience. Replies strictly confidential. OPD 332.

### POSITIONS OFFERED

**Assistant Varnish** maker wanted, for responsible position in New York City. A brief resume of your experience with your reply will be appreciated. Letters will be treated confidentially. Our employees know of this ad. OPD 333.

### POSITIONS WANTED

**Production Problems?** Let me take them off your shoulders. I can handle labor, scheduling, ... purchasing shipping, warehousing, in- ... maintenance. Organic & Inorganic Experience ... material. Available now. OPD 323.

**Administrative Assistant** to general manager. Graduate chemists, 40, with extensive technical and administrative experience desires to advance in administrative field with food. Petroleum, Chemical or Essential Oil firm. Material control, coordination, troubleshooting, expediting, supervision, a quality control. OPD 329.

### REPRESENTATION OFFERED

**Importer Wishes** to appoint capable distributors in major cities for Potassium Ferricyanide Crystals and Granular, excellent quality packed in fiber drums 110 lbs. net. Continuously available. Highly competitive prices. Write OPD 331.

### REPRESENTATION WANTED

**Need Representative?** If you have either a new or established chemical raw material line that you wish to market on the Pacific Coast and desire capable representation covering all manufacturing industry we would be interested in discussing this with you. OPD 330.

### SERVICES OFFERED

**Complete Distillation** facilities for reclaiming all solvents. Blending, filtering and filling of drums from tank cars. Custom chemical processing under laboratory control. Industrial Organics Corporation, P. O. Box 26, Sayreville, New Jersey. Telephone: South Amboy 1-2334.

**Labels—Box** wraps Chemical, Paint and Drug Industries, beautifully printed, hi-gloss colors designed for sales pints, quarts, gallons, established 1921, Philipson Press, 531 Gates Avenue, Brooklyn, N. Y. MAin 2-3175. Send your label with quantity for estimate.

## PHARMACIST

**Manufacturing Development**

**Technical department of major pharmaceutical manufacturer located in Philadelphia desires development pharmacist with B.S. in pharmacy, M.S. in pharmacy, chemistry, biology and four to five years' industrial experience. Liberal benefit program. Send complete resume.**

**BOX NO. 328**
OIL, PAINT AND DRUG REPORTER
30 Church Street, New York 7, N. Y.

## ALCOHOLIC BEVERAGE CHEMIST

**Well-financed rectifier of alcoholic beverages wants young ambitious energetic beverage chemist for a responsible position with exciting management possibilities.**

**Applicants must have following qualifications:**

**College degree in Chemistry or Chemical Engineering.**
**Experience as beverage chemist in production of cordials, liqueurs.**
**Experience in blending whiskey desirable.**
**Age to 35.**

**Relocation in one of the most splendid cities of the U. S. Send brief resume of qualifications to BOX NO. 334.**
OIL, PAINT AND DRUG REPORTER
30 Church Street, New York 7, N. Y.

## Public AUCTION Sale

The former research and biological laboratories of SHARP & DOHME —DIVISION OF MERCK & CO., INC. At Glenolden, Penna. (2 miles S.W. of Philadelphia)

★ THE REAL ESTATE—**17 acres—150,000 sq. ft. buildings,** 1200 ft. on main line of P.R.R.—zoned industrial—all utilities —50% mortgage accepted.

★ THE EQUIPMENT—**Valued over $1,000,000.00.** 18 vacuum and freeze dryers—30 ammonia & air compressors—250 tanks (S.S., Copper, Alum., glass lined, etc.—50 to 5,000 gal.)—9 filter presses—20 condensers and surge drums—30 asst. pumps—18 centrifuges—6 sterilizers—6 S.S. stills and columns—25 copper percolators—S.S. rolls and dryer drums—extraction unit (Oliver Filter, Holofite desolventizer, soaker)—2 package boilers—pulverizers, cutters, mixers—Amm. receivers, coolers, 700 el. motors, asst., mostly new—conveyors —variety of maintenance, office, cafeteria and special equipment, etc., etc.

Auction to be held at Glenolden, Penna.
TUESDAY, APRIL 30, 1957
by M. J. WERSHOW AND DAVID WEISZ
Box 3644 — Richmond & Norris Streets, Phila. — NE 4-6444
at Glenolden — LUdlow 6-8599

*Inspection Now—Write for Brochure*

## *BDSA's Funds*

*—Continued from page 3*

involved. He urged the committee to restore the full amount requested for the divisions.

The commerce department felt the weight of the economy ax being swung in the house against the President's budget to a greater degree than has any other department thus far. The committee reduced the department's appropriations for the fiscal year $212,402,000 or about 25 percent under the amount recommended by the budget.

Most of the reduction came in funds for the Maritime Administration and the Civil Aeronautics Administration, with a scattering of cuts in other activities of the department. For example, the Census bureau was cut $653,200 below the budget estimate, but the only activity for which no funds were allotted was the proposed census of transportation.

The Bureau of Foreign Commerce got the full $3,060,000 requested for export control, but overall funds for the bureau were reduced $383,500 below the budget. The Office of Business Economics got all but $20,000 of its requested appropriation.

The Bureau of Standards had all its money for construction of new facilities knocked out by the committee after it found that the estimate for the new facilities had risen 35 percent from $63,500,000 to $85,810,000 between last year when the program was first presented and this year when it came time to advance the funds.

## *Naugatuck Chemical*

*—Continued from page 5*

Baton Rouge. Scheduled to be completed in December, this plant will require a total investment of more than $7 million. It will be used to make "Kralastic" plastic materials employed in pipe, automotive parts and many industrial products.

The new plant will triple Naugatuck Chemical's production capacity for Kralastic. When completed it will also give the company the capacity to make more than sixty million pounds of plastic and synthetic rubber yearly in Baton Rouge.

The "Paracril ... expansion was accomplished by adding new ... equipment and modifying existing units at the Baton Rouge plant. This synthetic rubber, a copolymer of butadiene and acrylonitrile, has good resistance to oil and fat which swell ordinary rubber.

The new "Kralastic" plant is being built on land bought by the company in 1956. It will have several buildings, including production, laboratory and office units. The main raw materials for the plastic—butadiene, styrene and acrylonitrile—will be shipped into the new plant from the nearby area by tankcar and truck. Shipments from the plant will be by rail, water and truck.

"Kralastic" is a tough, corrosion-resistant blend of rubber and plastic. Thousands of miles of pipe made from it are now carrying natural gas, chemicals and water. It is also a molding material.


**SELL NOW!**

**TURN INVENTORIES INTO CASH!**

RAW MATERIALS
RESIDUES
BY-PRODUCTS
FINISHED PRODUCTS

*Chemical Service Corp.*
88 BEAVER ST. N. Y. 5,
HAnover 2-6970
EST. 1925 Cable address "RETORTS" N. Y.

**WANTED** **INVENTORY CLOSE-OUT ITEMS**
SURPLUS CHEMICALS, PIGMENTS, RESINS, SOLVENTS
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Barclay CHEMICAL COMPANY, Inc.
77 VARICK STREET NEW YORK 13, N. Y. · WO 4-5120

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Vinyl acetate monomer, 55-gal. dms., c.l., works lb. .19 - —
55-gal. dms., l.c.l., works lb. .20 - —
tanks, works lb. .16½- —
tanktrucks less than 4,000 gal., works lb. .17½- —
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .35 - —
Vinyl chloride monomer, tanks, works lb. .11 - .12
Vinyl ether, tech., dms., c.l., works. lb. .26 - —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
USP, anesthesia, bots., 50cc. hospitals bot. 1.12 - —
USP, anesthesia, bots., 75cc. hospitals bot. 1.56 - —
Vinyl ethyl ether, tech., dms., works lb. .30 - —
Vinyl isobutyl ether, tech., dms., l.c.l., works lb. .35 - —
Vinyl methyl ether, cyls., works lb. .30 - —
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.
Vinyl propionate, monomer dms., c.l., dlvd lb. .49 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.36 - —
1 to 9 dms. works lb. 1.50 - —
tanks, works lb. 1.33 - —
Vinyltoluene, dms., c.l., frt. alld lb. .18½- —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
Virginia type red, bbls., works lb. 1.40 - —
Viosteral in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Syn., dry, 500,000 units per gram, kilo lots kilo.67.50 - —
dry, 325,000 units per gram, same basis kilo.43.88 - —
dry, 250,000 units per gram, same basis kilo.33.75- —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin A, palmitate, liq. 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
Liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin $B_1$ (see Thiamine hydrochloride).
Vitamin $B_2$ (see Riboflavin and Yeast).
Vitamin $B_{12}$, cryst., 1-gram or 5-gram vials gram 245.00 - —
Oral grade solids, in containers of 1 and 5 grams of $B_{12}$ activity gram 185.00 - —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin $D_2$, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram, less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin $K_1$, 25 gram bots. gram 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

## W

Wahoo root, bark, bls. lb. 2.25 - —
bls., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
bls., 5-24-lb. lots, ens., New York or Chicago lb. 2.15 - —
Watchung-type reds, bbls lb. 1.95 - —
Wattle bark, fair average, African, bls., ex dock ton.80.00 - —
Merchantable, bls., ex dock ton.75.00 - —
Wattle extract, liq., 35% tannin, bbls. lb. .08¼- .08½
Solid, East Africa, 60% tannin, bgs., ex dock, duty extra lb. .08275- —
Solid, South Africa, 60% tannin, bgs., ex dock, duty extra lb. .0840- —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
ens., 5-24-lb. lots, New York or Chicago lb. 2.15 - —

### Waxes

Wax quotations, formerly grouped under one heading, are now listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms gal. 11.25 - —
Wheat starch (see Starch, wheat).
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .18 - .19
White precipitate, USP, powd., dms., lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .20 - —
Thin, rossed, bls. lb. .21 - —
Wintergreen oil, USP, nat., northern, ens lb. 6.35 -10.30
USP, nat., southern, ens lb. 4.50 - 7.50
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. lb. .16 - .17
Witch hazel leaves, bls. lb. .27 - —
Wollastonite, fine, bgs., c.l., works. ton.39.50 - —
bgs., l.c.l., ex whse ton.56.00 - —
Medium, bgs., c.l., works ton.27.00 - —
bgs., l.c.l., ex whse ton.44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed oil (see Chenopodium oil, NF).
Wormseed oil, Levant, bgs. lb. 4.25 - 4.50
Wormwood oil, ens. lb. 5.50 - —

## X

Xylene, coaltar, indust., tanks, works—
Bethlehem, Pa. gal. .34 - —
Birmingham dist. gal. .32 - —
Chicago dist. gal. .35 - —
Cleveland dist. gal. .34½- —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Middletown, Ohio gal. .34 - —
Minnequa, Colo. gal. .34 - —
Philadelphia dist. gal. .34 - —
Pittsburgh dist. gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind. gal. .34 - —
Youngstown, Ohio gal. .32½- —
Petroleum, indust., tanks, works:—
Bayonne, N. J. gal. .34 - .35½
Baytown, Tex. gal. .33 - .35½
Chicago, Ill. gal. .35 - .35½
Houston, Tex. gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - .35½
Wood River, Ill. gal. .35 - —
Xylenol cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
Cryst., 58°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .30 - —
45-47°C., m.p., dms., c.l., same basis lb. .212 - —
dms., l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
Xylenol fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis gal. .96 - —
dms., l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
b.r. 7°-9°C., dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
dms., l.c.l., same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .33 - —

### Xylol

Xylol quotations, both coaltar and petroleum, may now be found under Xylene.

## Y

Yara, yara, ens. lb. 2.15 - 2.65
Yeast, brewers, debittered, USP, Saccharomyces, dlvd. lb. .27 - —
Dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 - —
90 Int'l B units per gram, 100-lb. dms lb. .52 - —
200 Int'l B units per gram, 100-lb. dms lb. .56 - —
300 Int'l B units per gram, 100-lb. dms lb. .60 - —
Torula, USP, dlvd. lb. .18 - —

### Yellow Pigments

Yellow pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. lb. .40 - .42
Ylang-ylang oil, Bourbon, bots lb. 14.00 -16.00
Bourbon, extra, bots lb. 28.00 -40.00
Madagascar, bots lb. No Stocks.
Yohimbine hydrochloride, bots, tins. oz. 3.75 - 4.25

## Z

Zein, bgs., 36,000-lb. lots or more. lb. .38 - —
bgs., 1,000 to 36,000-lb. lots, works. lb. .40 - —
bgs., smaller lots, works lb. .43 - —
Zinc acetate, NF, VIII, dms. lb. .53 - —
Tech., dms., works lb. .29½- .29¾
Zinc borate, bgs., c.l., dlvd. E lb. .192 - —
bgs., l.c.l., dlvd. E lb. .202 - —
Zinc chloride, NF, gran., dms lb. .42 - —
Precip., powd., dms. lb. .26 - —
Soln., 50%, dms., c.l., works. 100 lbs. 5.80 - —
dms., l.c.l., works 100 lbs. 6.40 - —
tanks, works 100 lbs. 5.15 - —
Tech., fused, dms., c.l., works. 100 lbs. 10.70 - —
dms., l.c.l., works 100 lbs. 11.20 - —
gran., fib. dms., c.l., works. 100 lbs. 11.45 - —
fib. dms., l.c.l., works 100 lbs. 11.95 - —
Zinc chromate, bbls., dlvd. lb. .29 - —
Basic, bbls., dlvd. lb. .34 - —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 - —
dms., smaller lots, works lb. .57 - —
Zinc dust, pigment, bbls., c.l., works lb. .17½- —
bbls., l.c.l., works lb. .18½- —
Zinc fluoride, bbls., works lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .22 - —
dms., l.c.l., frt. alld lb. .24 - —
Zinc metal, prime western slabs, E. St. Louis lb. .13½- —
Prime western, slabs, New York, lb. .14 - —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld lb. .24½- —
10% Zn, dms., frt. alld. lb. .30 - —
Zinc nitrate tech., cryst., bbls., works lb. .20 - —
Zinc oxide pigment, pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½- —
bgs., l.c.l., same basis lb. .15½- —
leaded, 35%, bgs., c.l., mills, frt. alld lb. .15½- —
bgs., l.c.l., same basis lb. .16½- —
50%, bgs., c.l., same basis lb. .15⅞- —
bgs., l.c.l., same basis lb. .16⅜- —
French process, coml., green seal, bgs., c.l., frt. alld lb. .15¾- —
bgs., l.c.l., same basis lb. .16¾- —
red seal, bgs., c.l., same basis, lb. .15¼- —
bgs., l.c.l., same basis lb. .16¼- —
white seal, bgs., c.l., same basis lb. .16¼- —
bgs., l.c.l., same basis lb. .17¼- —
Zinc oxide, USP, ctns., c.l., frt. alld. lb. .17½- —
ctns., l.c.l., same basis lb. .18½- —
Zinc oxide Pac. Coast prices 1c. higher.
Zinc phenolsulfonate, NF, gran., dms lb. .43 - .44
NF, powd., dms. lb. .46 - .53
Zinc resinate, precip. 7.2-7.6% Zn, dms., frt. alld lb. .29 - —
Zinc silicofluoride, dms., works lb. .12½- .14
Zinc stearate, tech., USP, ctns., c.l., lb. .41 - —
ctns., l.c.l. lb. .42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E 100 lbs. 8.75 - —
bgs., l.c.l., dlvd. E 100 lbs. 9.75 - —
USP, gran., dms. lb. .26 - —
Zinc sulfate in bbls. 40c. higher.
Zinc sulfide, pure, bgs., c.l. dlvd lb. .2530- —
Zinc undecylenate, dms. lb. 2.00 - —
Zinc yellow (see Zinc chromate).
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works 100 lbs. 10.85 - —
bbls., l.c.l., works 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l. lb. .25½- —
dms., l.c.l. lb. .26 - —
Zircon (G), gran., bgs., c.l., works. lb. .03¼- —
bgs., 5 tons to c.l., works lb. .03¾- —
bgs., 1 ton to 9,999-lb. lots, works lb. .04 - —
bgs., smaller lots, works lb. .06½- —
Milled, bgs., c.l., works lb. .04¼- —
bgs., 5 tons to c.l., works lb. .04¾- —
bgs., 1 ton to 9,999-lb. lots, works lb. .04¾- —
bgs., 500-1,999-lb. lots, works lb. .07½- —
Zircon (G) in barrels 1c. higher.
Zirconium acetate, 13% soln., $ZrO_2$, c.l., 30,000 lbs. minimum, works lb. .23 - —
Zirconium hydride, powd., dms., works lb. 7.25 - 9.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works lb. 1.50 - —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works lb. .45½- —
bgs., smaller lots, works lb. .48 - —
Electric-fused, milled, bgs., c.l., works lb. .59 - —
bgs., 5-ton lots, works lb. .59½- —
bgs., 1-ton to 9,999-lb. lots, works lb. .60 - —
bgs., 500 to 1,999-lb. lots, works lb. .60½- —
bgs., smaller lots, works lb. .63 - —
Glass polishing grade, 94-97% $ZrO_2$, bgs., works lb. .55 - .65
Opacifier grade, 85-90% $ZrO_2$, bgs., lb. .27 - .50
Stabilized oxide, 91% $ZrO_2$, milled, bgs lb. .62 - .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works lb. .35½- —

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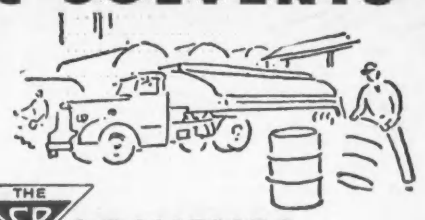

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